Ward
10/712823


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medl,biosis,embase,caplus;s l3

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     FILE 'REGISTRY' ENTERED AT 09:49:57 ON 30 AUG 2005
L1                STR
L2              2 S L1
L3             97 S L1 FUL
L4                STR
L5              0 SEARCH L4  SUB=L3 FUL
L6                STR L1
L7              0 SEARCH L6  SUB=L3 FUL
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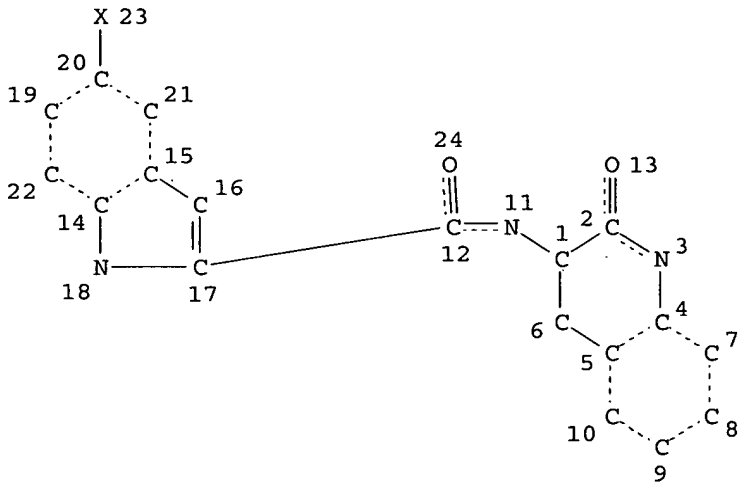
printed all 97 structures.

L1 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  24

STEREO ATTRIBUTES: NONE
L3             97 SEA FILE=REGISTRY SSS FUL L1
L4                STR
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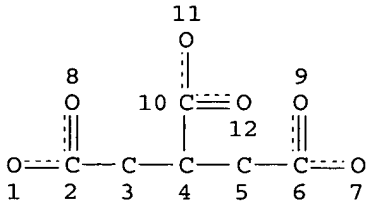

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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
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SEARCH TIME: 00.00.01

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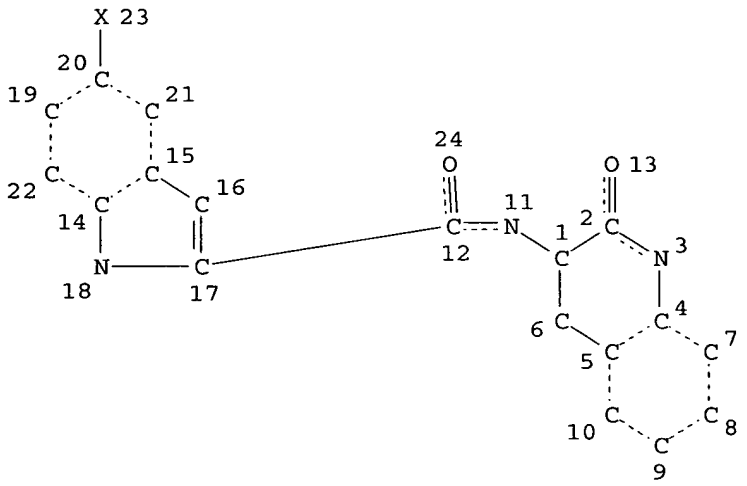
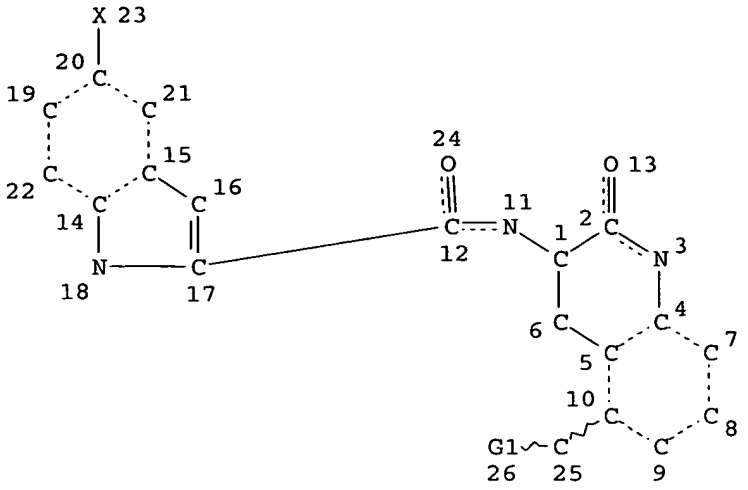


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
L3 97 SEA FILE=REGISTRY SSS FUL L1
L6 STR

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



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CH2-CH
@27 28

Page 2-A
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE
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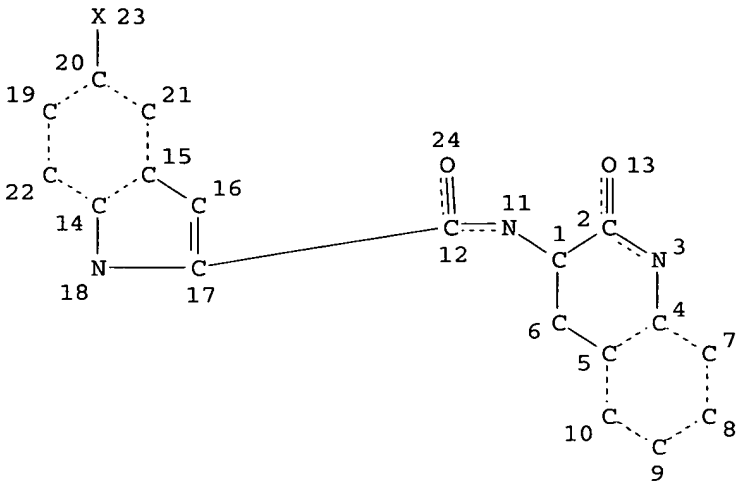
100.0% PROCESSED 97 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L1 STR

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



NODE ATTRIBUTES:
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DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 310 ITERATIONS 97 ANSWERS
SEARCH TIME: 00.00.01

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	241.73	241.94

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FILE 'BIOSIS' ENTERED AT 09:56:26 ON 30 AUG 2005

FILE 'EMBASE' ENTERED AT 09:56:26 ON 30 AUG 2005

FILE 'CAPLUS' ENTERED AT 09:56:26 ON 30 AUG 2005

L8 0 FILE MEDLINE
L9 0 FILE BIOSIS
L10 0 FILE EMBASE
L11 4 FILE CAPLUS

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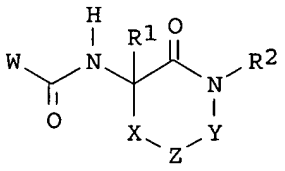
TOTAL FOR ALL FILES
L12 4 L3

=> d 1-4 ibib abs hitstr;s sher p?/au;s ellsworth b?/au

L12 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:589248 CAPLUS
DOCUMENT NUMBER: 141:140474
TITLE: Triglyceride and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compounds
INVENTOR(S): Sher, Philip M.; Ellsworth, Bruce A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 43 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004142938	A1	20040722	US 2003-712823		20031113
PRIORITY APPLN. INFO.:			US 2002-426465P	P	20021114

OTHER SOURCE(S): MARPAT 141:140474
GI



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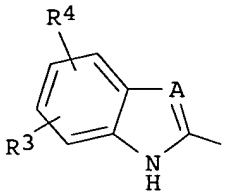

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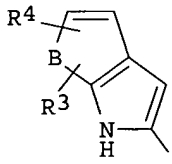

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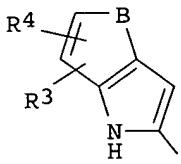

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AB Prodrugs of glycogen phosphorylase inhibiting compds. are provided, said prodrug compds., G(-O2CR')m(-OH)n(-O2C(CH2)pCH3)q [G = branched or straight C3-5-carbon chain and (-O2CR'), (-OH) and (-O2C(CH2)pCH3) are attached to any available carbon atom along G; m = 1 - 4; n = 0 - 3; p = 0 - 16; q = 0 - 3; where m + n + q = 3 or 4; and -O2CR' is a fragment of a compound I wherein W = W1, W2, W3; X = O, S, SO2, CHR5, , CHR5O, CHR5S, CHR5SO2, CHR5CO, CH2CHR5; Y = bond, CHR6; Z = aryl, heteroaryl; R1 =H, alkyl, alkenyl; R2 = H, alkyl, aryl, arylalkyl, heteroarylalkyl, alkenyl; R3, R4 = H, halo, CF3, CN, alkyl, alkoxy; R5, R6 = H, alkyl, aryl, alkenyl, CN, CN4R9A (tetrazole), CO2R9A, CONR9AR9B, CONR9AOR9B; A = CH, N;

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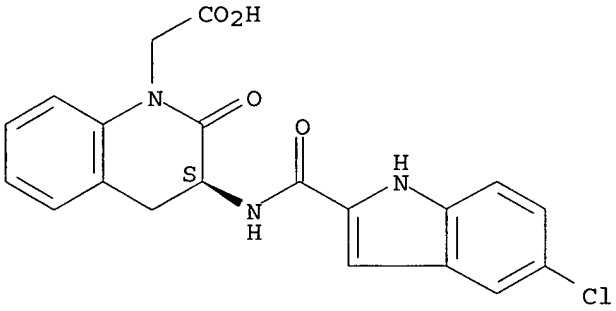
B = O, S; wherein R1, R2, R5, R6, R7, R8 = alkyl, aryl, alkenyl, arylalkyl,heteroarylalkyl, alkoxy, aryloxy and each may be substituted with 1 - 3 hydrogen bonding groups]. Thus, 3-[(5-chloroindolecarbonyl)amino]-3,4-dihydrocarbostyril I (R1 = R2 = H, W = 5-chloroindole, X = CH2, YZ = benzo) was prepared from 3-amino-3,4-dihydrocarbostyril via acylation with 5-chloroindolecarboxylic acid resin-bound 2,3,5,6-tetrafluorophenyl ester. Further provided are pharmaceutical compns. and methods for treating diabetes and related diseases employing compds. above, either alone or in combination with another therapeutic agent.

IT **639478-19-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and borane reduction of; preparation of triglyceride and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)

RN 639478-19-6 CAPLUS

CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

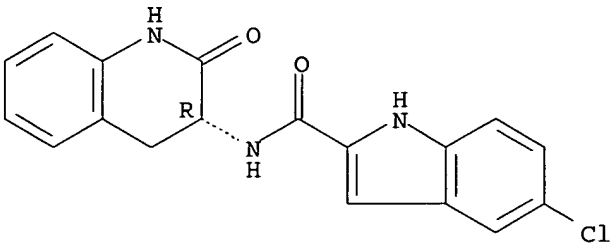


IT **639478-14-1P 639478-15-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and regioselective cyanomethylation of; preparation of triglyceride
and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)

RN 639478-14-1 CAPLUS

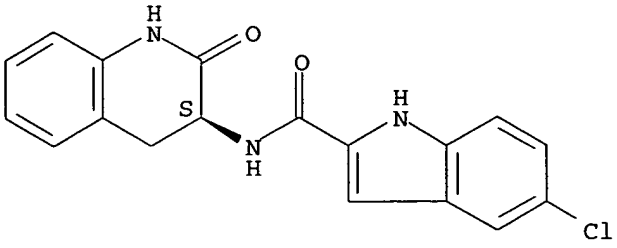
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



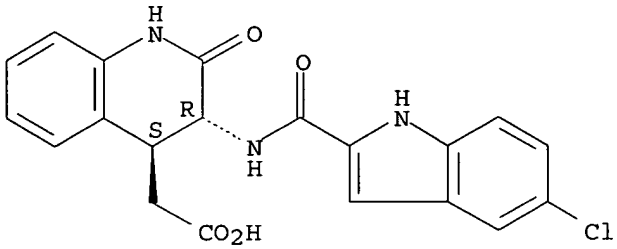
RN 639478-15-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

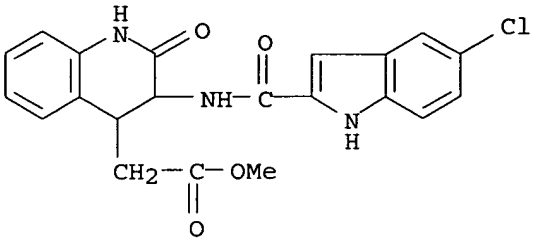


IT **639478-48-1P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and resolution of; preparation of triglyceride and triglyceride-like
prodrugs of glycogen phosphorylase inhibiting compds.)
RN 639478-48-1 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

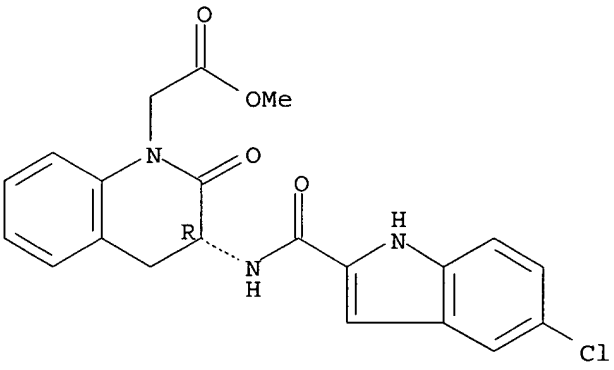


IT **724783-46-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and saponification of; preparation of triglyceride and triglyceride-like
prodrugs of glycogen phosphorylase inhibiting compds.)
RN 724783-46-4 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester (9CI) (CA INDEX NAME)



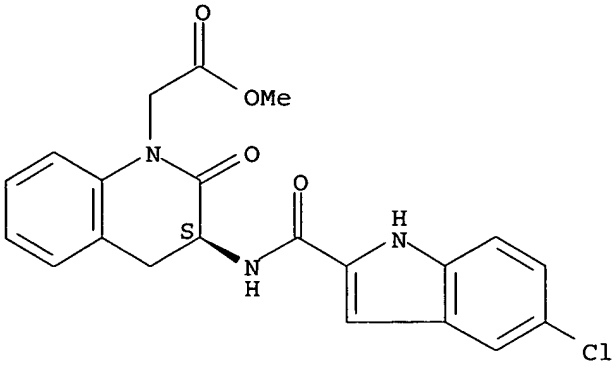
IT **639478-16-3P 639478-17-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and saponification or amidation of; preparation of triglyceride and
triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)
RN 639478-16-3 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-17-4 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

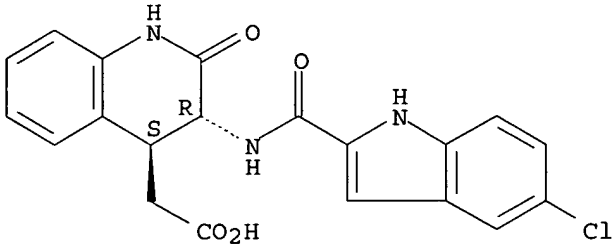
Absolute stereochemistry.



IT **639478-49-2P 639478-95-8P 724783-48-6P**
RL: PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of triglyceride and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)

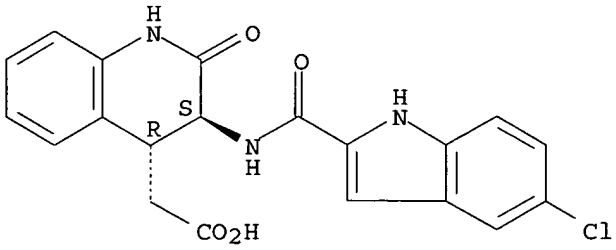
RN 639478-49-2 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-95-8 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3S,4R)- (9CI) (CA INDEX NAME)

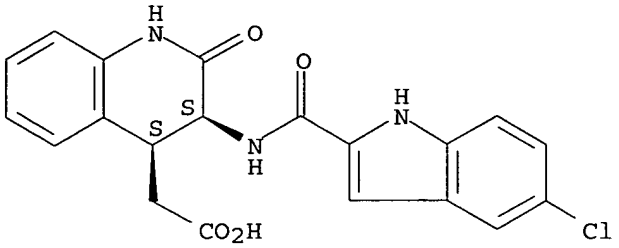
Absolute stereochemistry.



RN 724783-48-6 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4R)-rel- (9CI) (CA INDEX NAME)

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

Relative stereochemistry.



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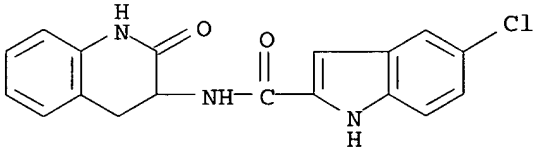
639478-20-9P 639478-21-0P 639478-22-1P
639478-25-4P 639478-26-5P 639478-27-6P
639478-46-9P 639478-47-0P 639478-50-5P
652142-54-6P 652142-55-7P 724783-27-1P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of triglyceride and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)

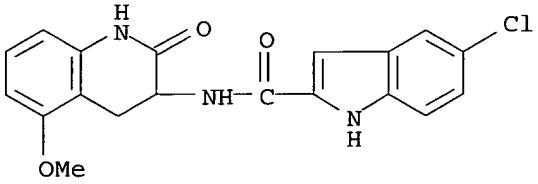
RN 599192-33-3 CAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



RN 639478-12-9 CAPLUS

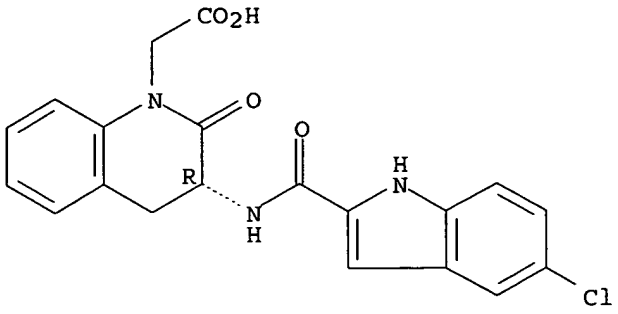
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-5-methoxy-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



RN 639478-18-5 CAPLUS

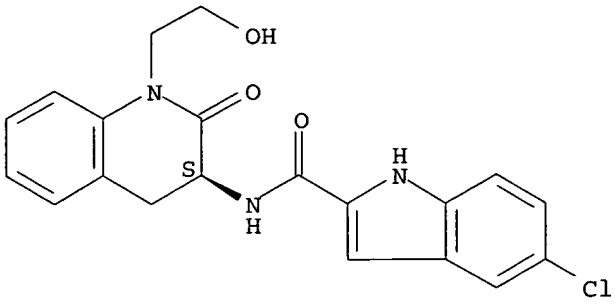
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



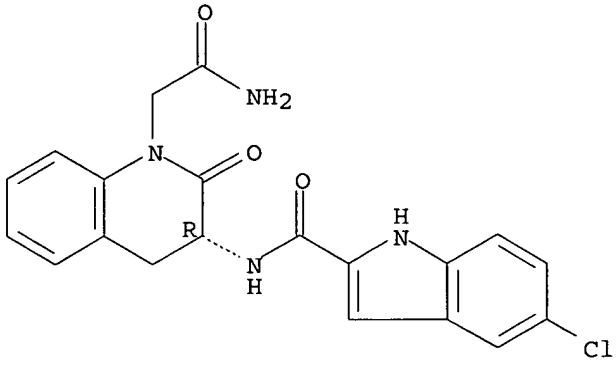
RN 639478-20-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-(2-hydroxyethyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



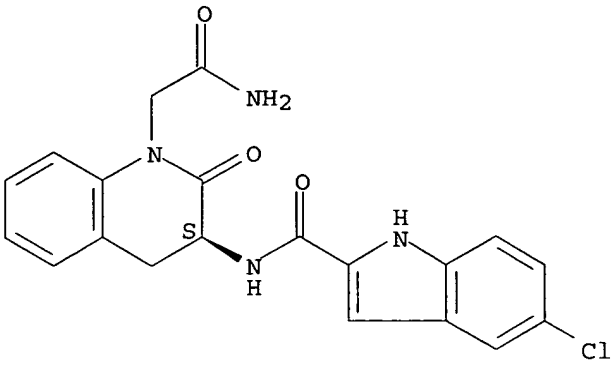
RN 639478-21-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



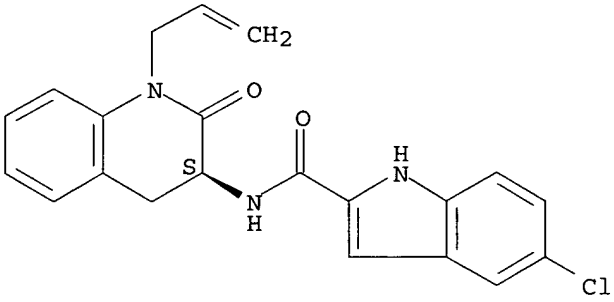
RN 639478-22-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



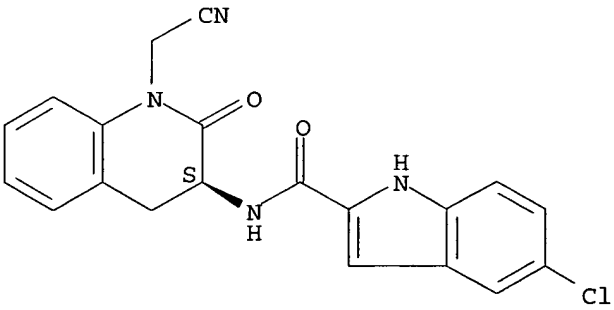
RN 639478-25-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-1-(2-propenyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-26-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

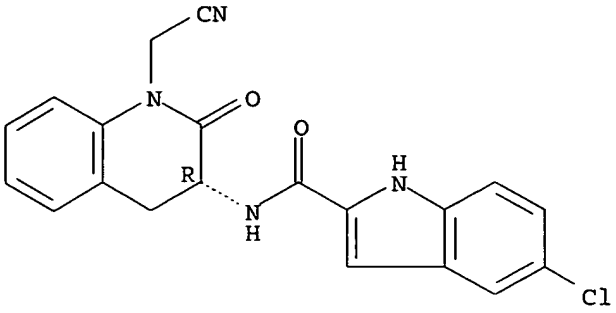
Absolute stereochemistry.



RN 639478-27-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

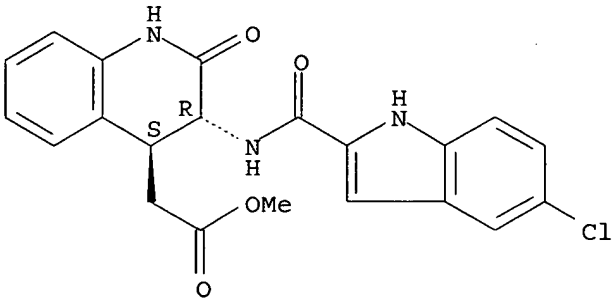
Absolute stereochemistry.

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



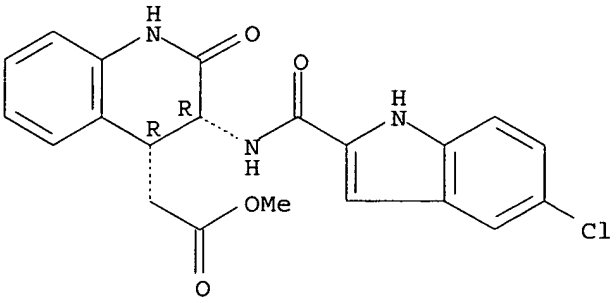
RN 639478-46-9 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester, (3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

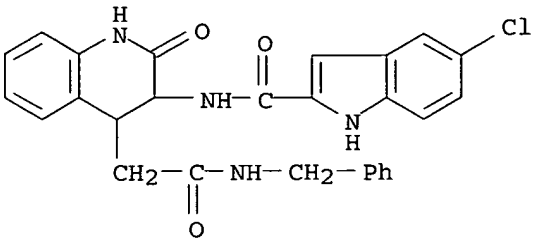


RN 639478-47-0 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester, (3R,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

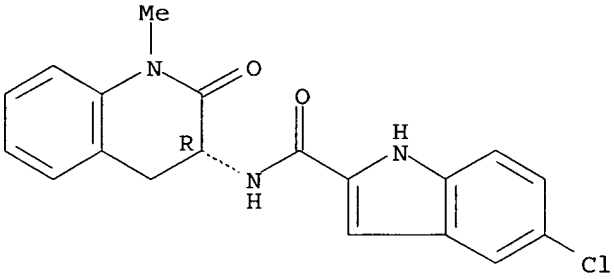


RN 639478-50-5 CAPLUS
CN 4-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



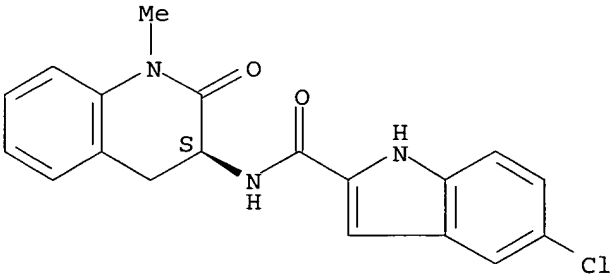
RN 652142-54-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



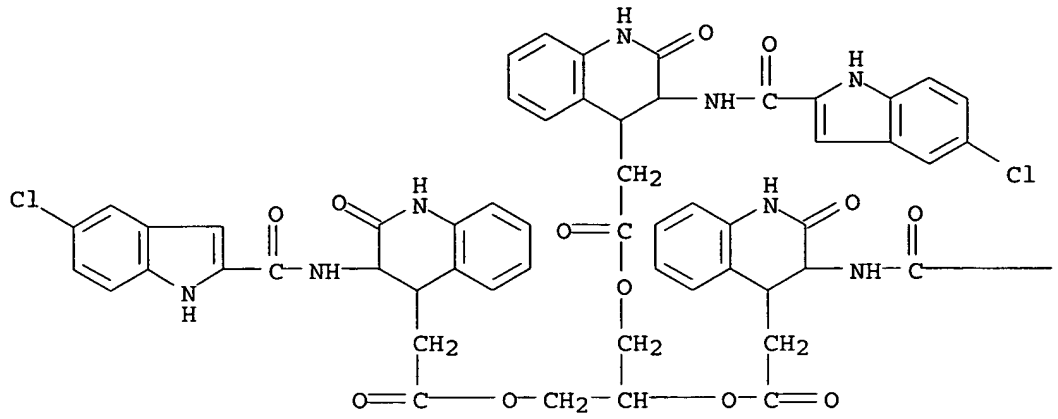
RN 652142-55-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

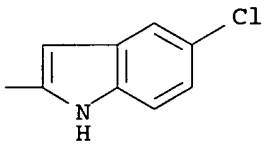


RN 724783-27-1 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, 1,2,3-propanetriyl ester, (3R,3'R,3''R,4S,4'S,4''S)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

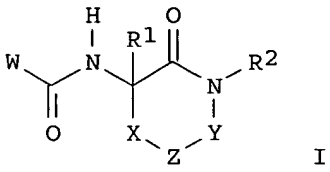


L12 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:3661 CAPLUS
DOCUMENT NUMBER: 140:73181
TITLE: Lactam glycogen phosphorylase inhibitors and their use in disease treatment
INVENTOR(S): Sher, Philip; Wu, Gang; Stouch, Terry; Ellsworth, Bruce
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 51 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004002495	A1	20040101	US 2003-440851		20030519
PRIORITY APPLN. INFO.:			US 2002-382002P	P	20020520

OTHER SOURCE(S): MARPAT 140:73181
GI

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



I

AB Lactams I (W = bicyclic heteroaryl; X = O, S, SO2, CHR3, CHR3O, CHR3S, CHR3SO2, CHR3CO, CH2CHR3; Y = bond, CHR3; Z = aryl, heteroaryl; R1 = H, alkyl, aryl, alkenyl; R2 = H, alkyl, aryl, arylalkyl, heteroarylalkyl, alkenyl; R3 = H, alkyl, aryl, alkenyl, CN, tetrazole derivative, CO2R4, CONR4R4, CONR4OR4; R4 = H, alkyl, aryl, arylalkyl, heteroarylalkyl, etc.) which are glycogen phosphorylase inhibitors are disclosed. Further provided is a method for treating diabetes and related diseases employing a glycogen phosphorylase inhibiting amount of the above compound, either alone or in combination with another therapeutic agent. Thus, the syntheses of 3-(5-chloroindole-2-carbonylamino)-5-methoxy-3,4-dihydrocarbostyril and 3-(5-chloroindole-2-carbonylamino)-2,3,4,5-tetrahydro-1H-1-benzazepin-2-one, and numerous other related compds., are described.

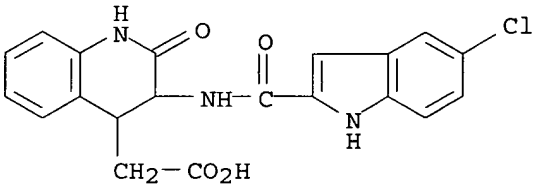
IT **639478-94-7P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(lactam glycogen phosphorylase inhibitors and their use in disease treatment)

RN 639478-94-7 CAPLUS

CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo- (9CI) (CA INDEX NAME)



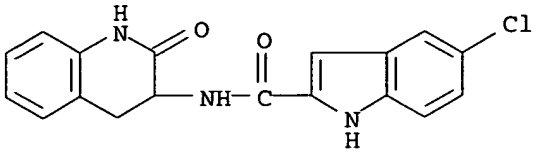
IT **599192-33-3P 639478-12-9P 639478-14-1P**
639478-15-2P 639478-16-3P 639478-17-4P
639478-18-5P 639478-19-6P 639478-20-9P
639478-21-0P 639478-22-1P 639478-23-2P
639478-24-3P 639478-25-4P 639478-26-5P
639478-27-6P 639478-46-9P 639478-47-0P
639478-48-1P 639478-49-2P 639478-50-5P
639478-95-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

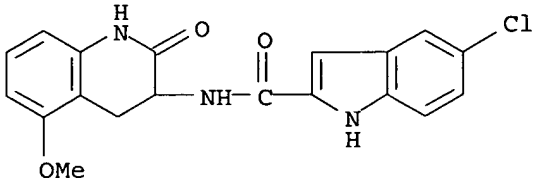
(lactam glycogen phosphorylase inhibitors and their use in disease treatment)

RN 599192-33-3 CAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)

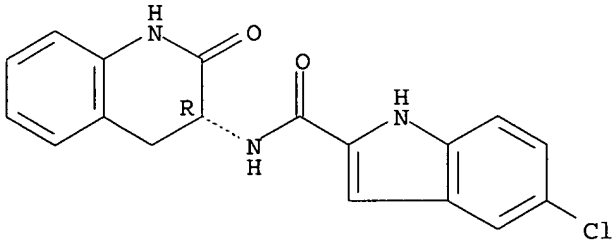


RN 639478-12-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-5-methoxy-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



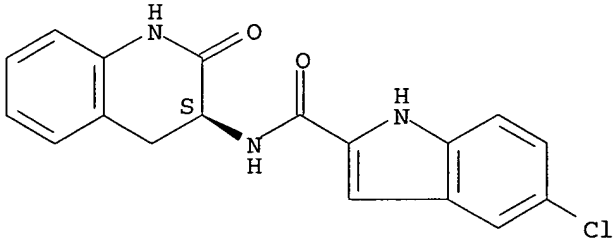
RN 639478-14-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-15-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

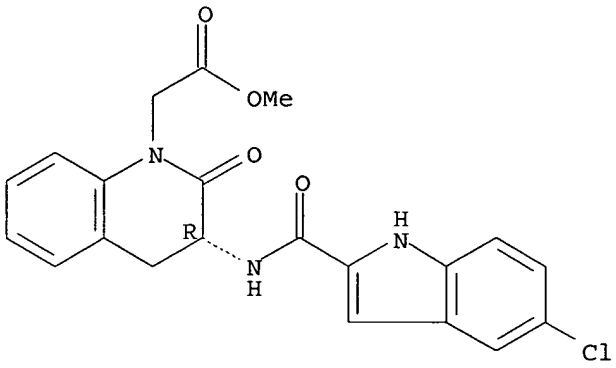
Absolute stereochemistry.



RN 639478-16-3 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester, (3R)- (9CI) (CA INDEX NAME)

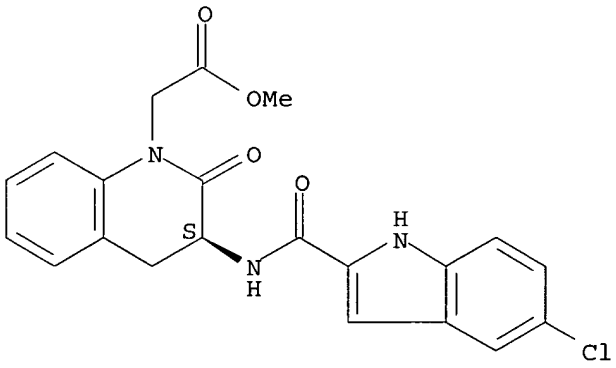
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

Absolute stereochemistry.



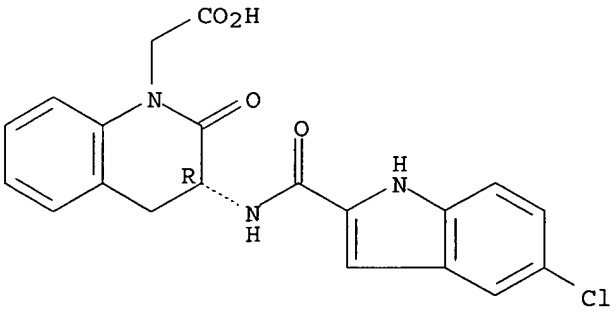
RN 639478-17-4 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-18-5 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3R)- (9CI) (CA INDEX NAME)

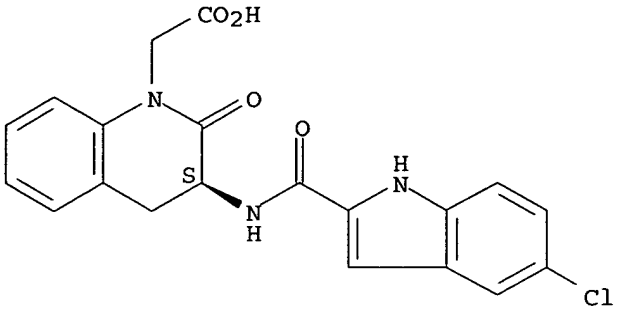
Absolute stereochemistry.



RN 639478-19-6 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-

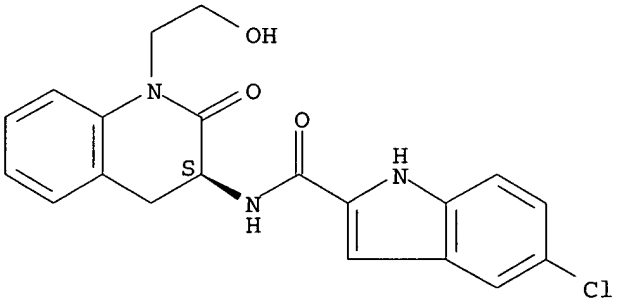
3,4-dihydro-2-oxo-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



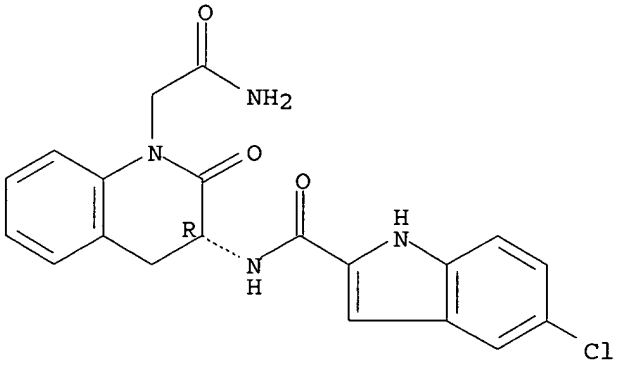
RN 639478-20-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-(2-hydroxyethyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-21-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3R)- (9CI) (CA INDEX NAME)

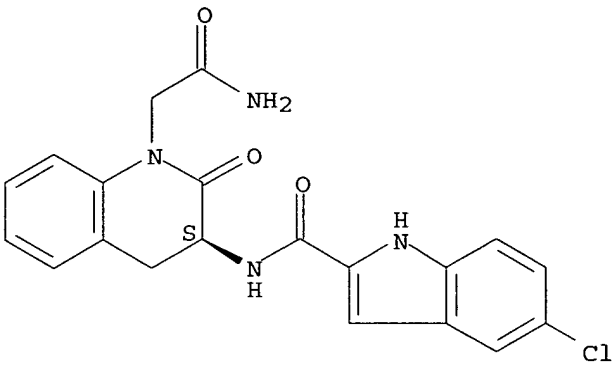
Absolute stereochemistry.



RN 639478-22-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3S)- (9CI) (CA INDEX NAME)

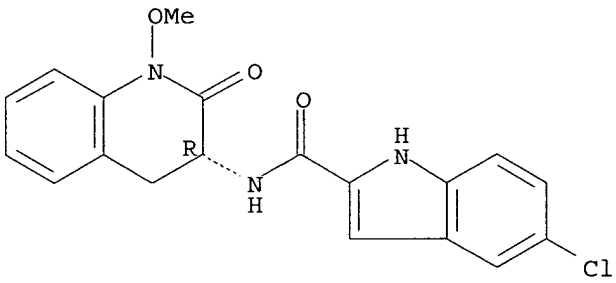
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

Absolute stereochemistry.



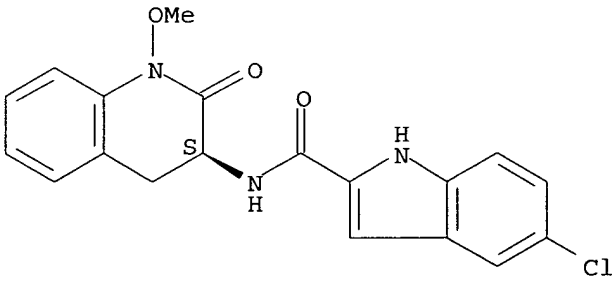
RN 639478-23-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-1-methoxy-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



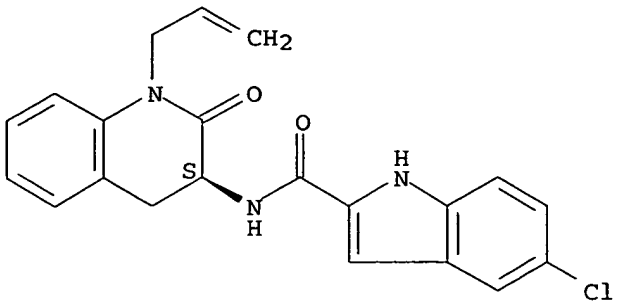
RN 639478-24-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-methoxy-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



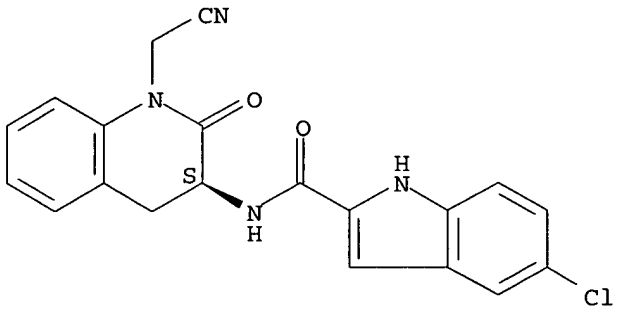
RN 639478-25-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-1-(2-propenyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



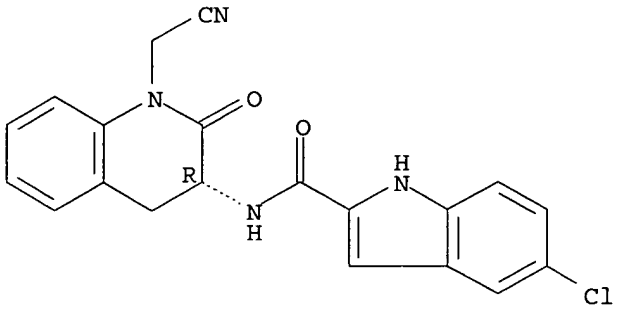
RN 639478-26-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



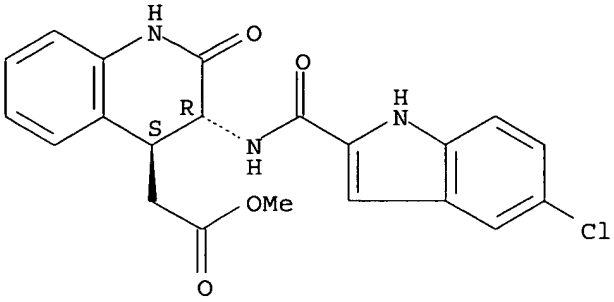
RN 639478-27-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



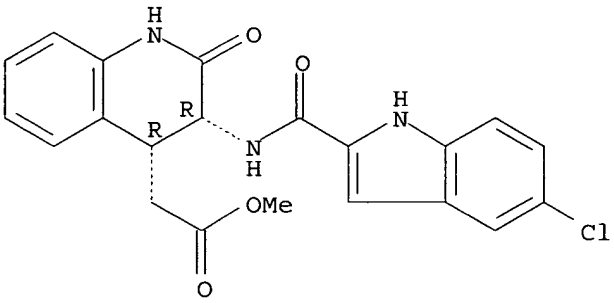
RN 639478-46-9 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester, (3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



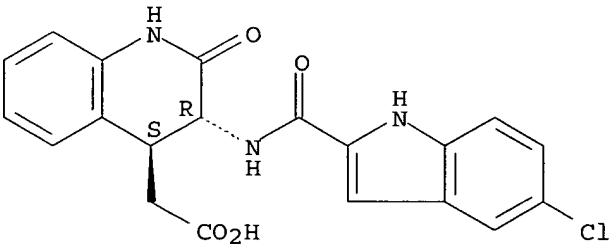
RN 639478-47-0 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester, (3R,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



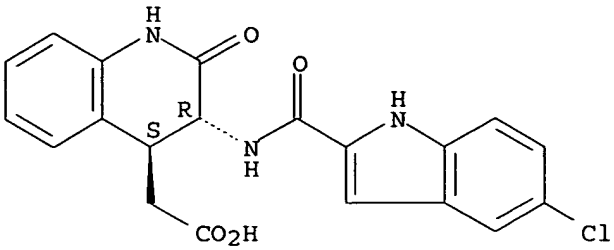
RN 639478-48-1 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

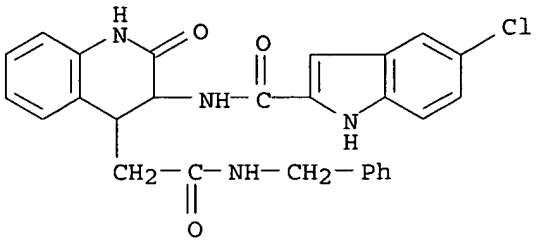


RN 639478-49-2 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

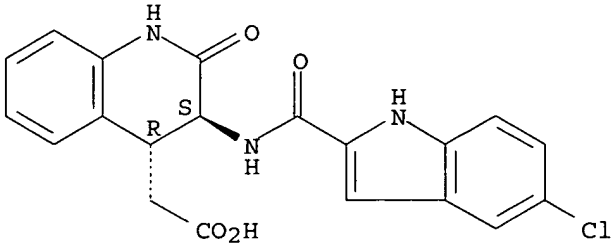


RN 639478-50-5 CAPLUS
CN 4-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 639478-95-8 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:928876 CAPLUS
DOCUMENT NUMBER: 140:145982
TITLE: Novel 3,4-dihydroquinolin-2(1H)-one inhibitors of human glycogen phosphorylase a
AUTHOR(S): Rosauer, Keith G.; Ogawa, Anthony K.; Willoughby, Chris A.; Ellsworth, Kenneth P.; Geissler, Wayne M.; Myers, Robert W.; Deng, Qiaolin; Chapman, Kevin T.; Harris, Georgianna; Moller, David E.
CORPORATE SOURCE: Department of Basic Chemistry, Merck Research Laboratories, Rahway, NJ, 07065, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(24), 4385-4388
CODEN: BMCLE8; ISSN: 0960-894X

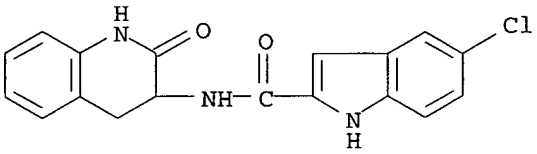
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:145982

AB The preparation of a series of substituted indoles coupled to six- and seven-membered cyclic lactams is described and their role as human glycogen phosphorylase a inhibitors discussed. The SAR of the indole moiety and lactam ring are presented.

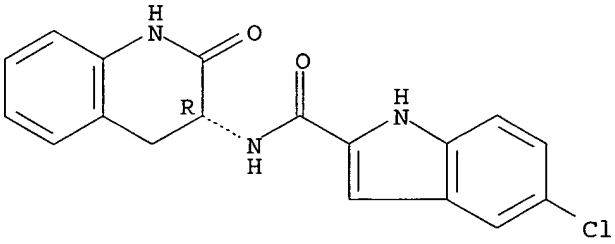
IT **599192-33-3P 639478-14-1P 639478-15-2P**
652142-53-5P 652142-54-6P 652142-55-7P
652142-59-1P 652142-60-4P 652142-73-9P
652142-74-0P 652142-75-1P 652142-77-3P
652142-78-4P 652142-79-5P 652142-80-8P
652142-81-9P 652142-82-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of indolecarbonylaminoquinolinones and related compds. as inhibitors of human glycogen phosphorylase a)

RN 599192-33-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



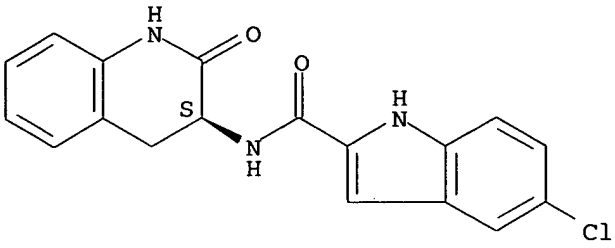
RN 639478-14-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

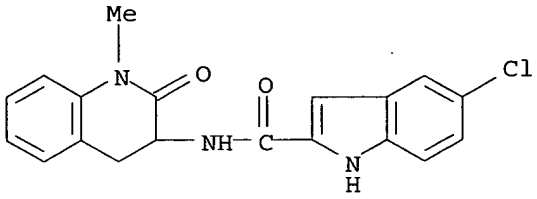


RN 639478-15-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

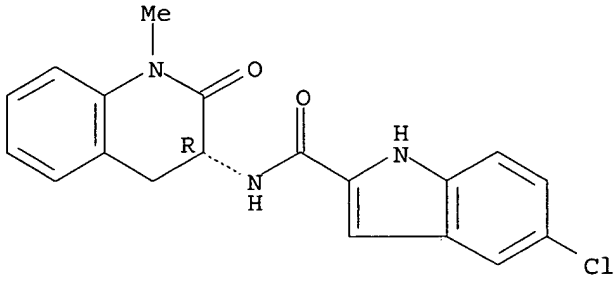


RN 652142-53-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



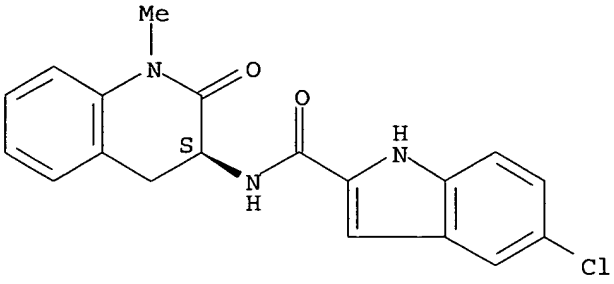
RN 652142-54-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

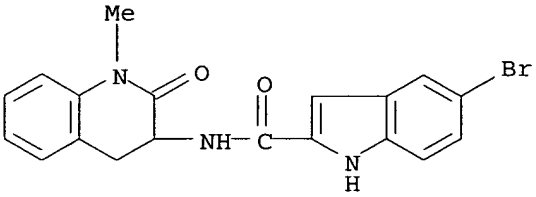


RN 652142-55-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

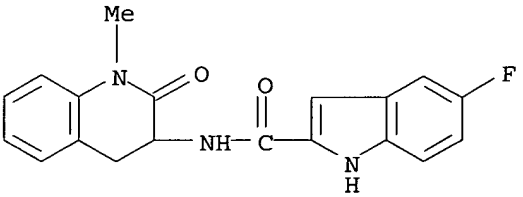
Absolute stereochemistry.



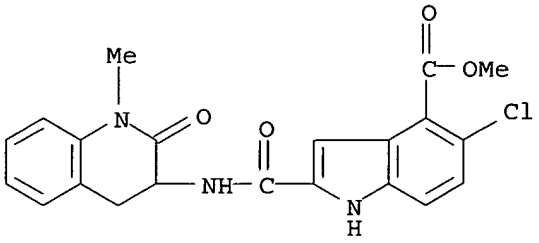
RN 652142-59-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-bromo-N-(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



RN 652142-60-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-fluoro-N-(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)

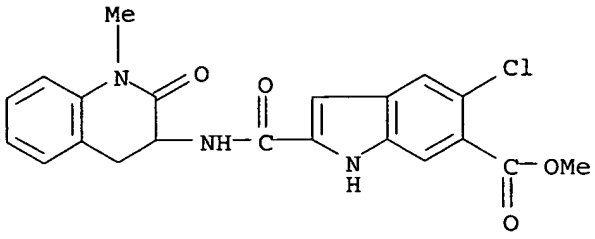


RN 652142-73-9 CAPLUS
CN 1H-Indole-4-carboxylic acid, 5-chloro-2-[[(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

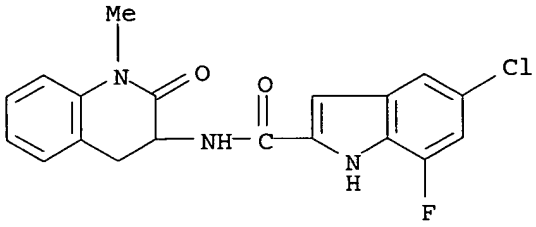


RN 652142-74-0 CAPLUS
CN 1H-Indole-6-carboxylic acid, 5-chloro-2-[[(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

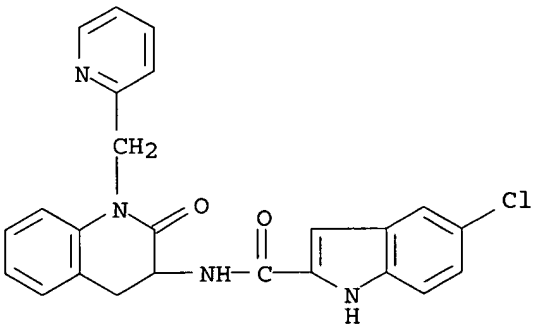
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



RN 652142-75-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-7-fluoro-N-(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)

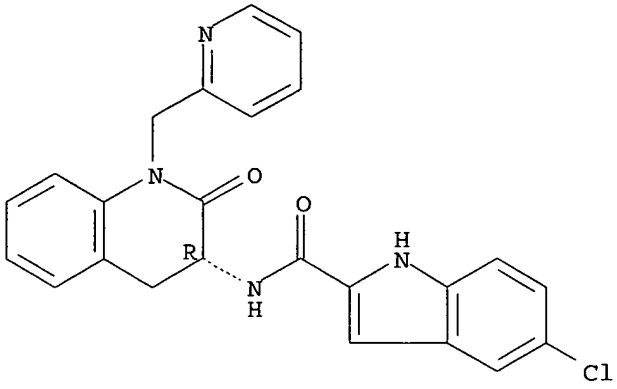


RN 652142-77-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-2-oxo-1-(2-pyridinylmethyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)



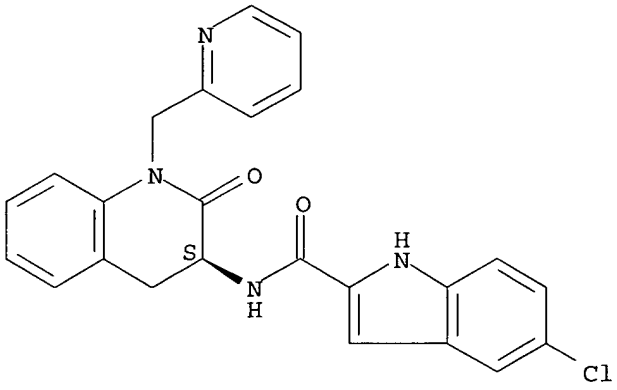
RN 652142-78-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-2-oxo-1-(2-pyridinylmethyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

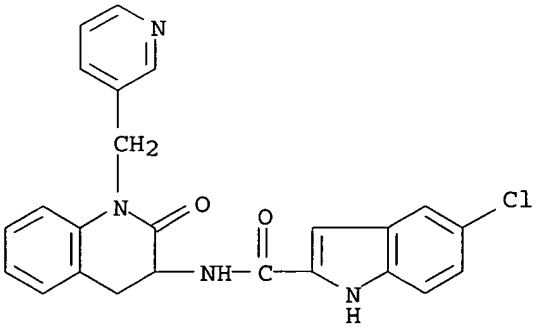


RN 652142-79-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-1-(2-pyridinylmethyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

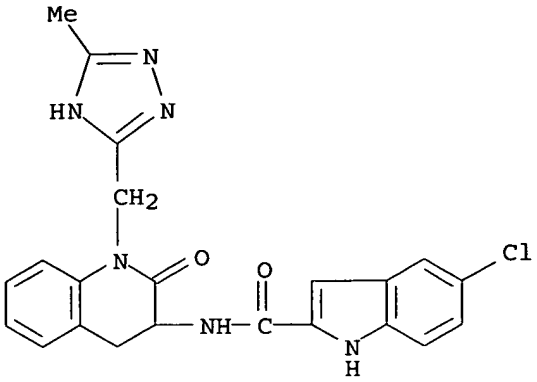


RN 652142-80-8 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-2-oxo-1-(3-pyridinylmethyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

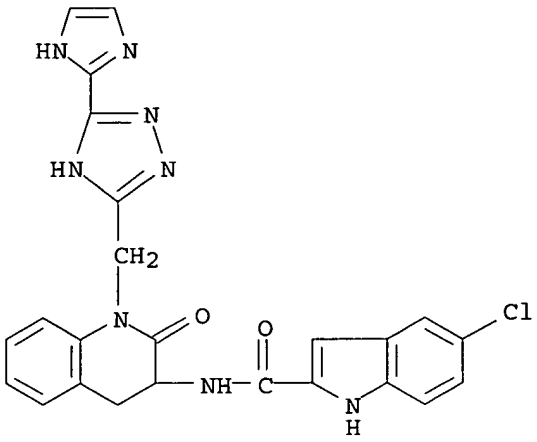


RN 652142-81-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[(5-methyl-1H-

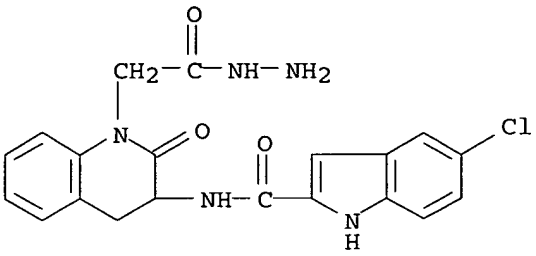
1,2,4-triazol-3-yl)methyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 652142-82-0 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[[5-(1H-imidazol-2-yl)-1H-1,2,4-triazol-3-yl]methyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



IT **652142-76-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of indolecarbonylaminoquinolinones and related compds. as inhibitors of human glycogen phosphorylase a)
RN 652142-76-2 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, hydrazide (9CI) (CA INDEX NAME)

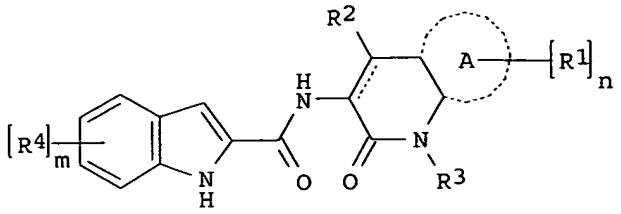


REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:719471 CAPLUS
DOCUMENT NUMBER: 139:261174
TITLE: Preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors
INVENTOR(S): Birch, Alan Martin; Morley, Andrew David
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003074513	A2	20030912	WO 2003-GB893		20030304
WO 2003074513	A3	20031231			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
EP 1485371	A2	20041215	EP 2003-712313		20030304
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
US 2005131016	A1	20050616	US 2003-506748		20030304
JP 2005525364	T2	20050825	JP 2003-572981		20030304
PRIORITY APPLN. INFO.:			GB 2002-5162	A	20020306
			WO 2003-GB893	W	20030304

OTHER SOURCE(S): MARPAT 139:261174
GI



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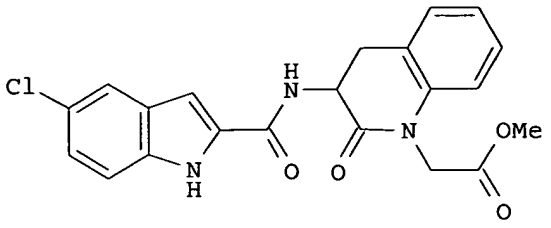


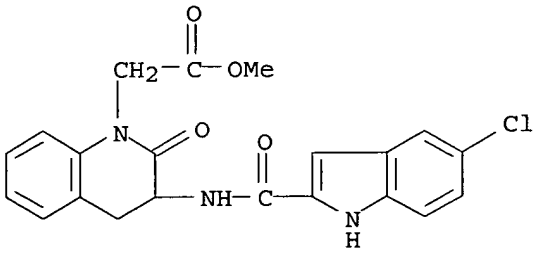
II

AB The title compds. [I; A = phenylene or heteroarylene; m = 0-2; n = 0-2; R1 = halo, NO2, CN, OH, CO2H, etc.; R2 = H, OH, CO2H; R3 = H, OH, aryl, heterocyclyl, etc.; R4 = H, halo, NO2, CN, etc.] which possess glycogen phosphorylase inhibitory activity and accordingly have value in the treatment of disease states associated with increased glycogen phosphorylase activity such as diabetes type II, were prepared Thus, amidation of 5-chloro-1H-indole-2-carboxylic acid with Me 2-(3-amino-2-oxo-3,4-dihydroquinolin-1-(2H)-yl)acetate (preparation given) in the presence of HOBT, DCM and EDCI afforded 59% II. The compds. I showed IC50 values in the range 100μM to 1nM against against hrl glycogen phosphorylase a. Pharmaceutical composition comprising the compound I was claimed.

IT **599192-30-0P 599192-32-2P 599192-36-6P**
599192-81-1P 599192-83-3P 599192-88-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors)

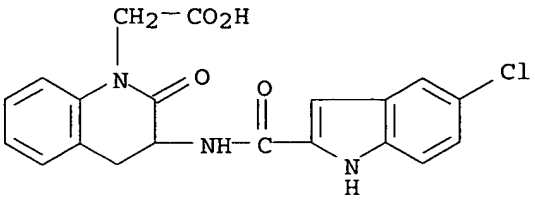
RN 599192-30-0 CAPLUS

CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

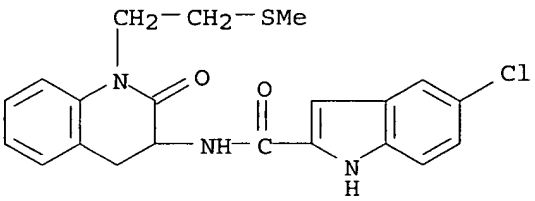


RN 599192-32-2 CAPLUS

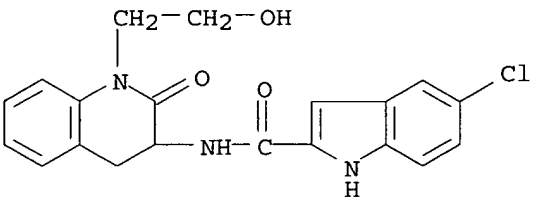
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



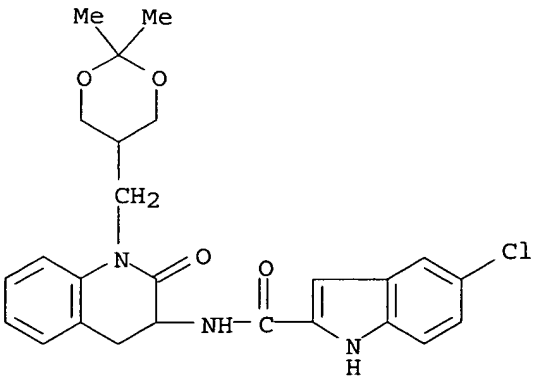
RN 599192-36-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[2-(methylthio)ethyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599192-81-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-(2-hydroxyethyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



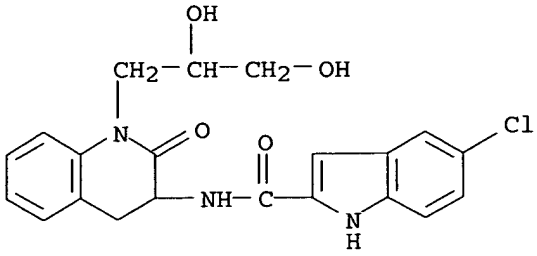
RN 599192-83-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[(2,2-dimethyl-1,3-dioxan-5-yl)methyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599192-88-8 CAPLUS

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-(2,3-dihydroxypropyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



IT **599192-33-3P 599192-34-4P 599192-37-7P**
599192-39-9P 599192-41-3P 599192-43-5P
599192-44-6P 599192-46-8P 599192-48-0P
599192-50-4P 599192-51-5P 599192-53-7P
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599192-73-1P 599192-74-2P 599192-76-4P
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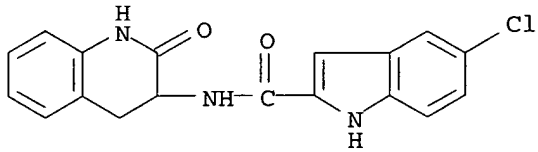
599192-91-3P 599192-93-5P 599192-95-7P
599192-97-9P 599192-98-0P 599193-00-7P
599193-05-2P 599193-09-6P 600653-69-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors)

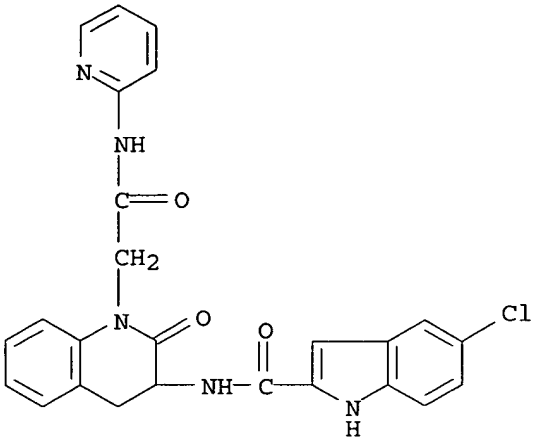
RN 599192-33-3 CAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)

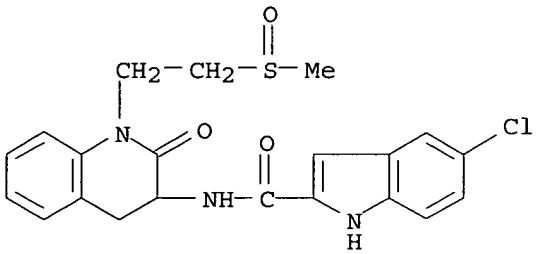


RN 599192-34-4 CAPLUS

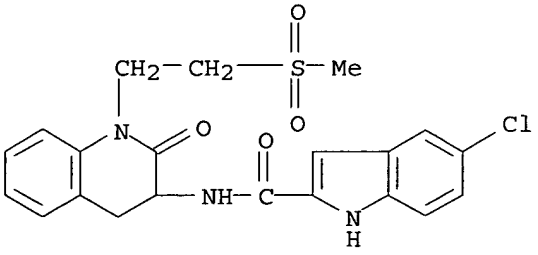
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-2-pyridinyl- (9CI) (CA INDEX NAME)



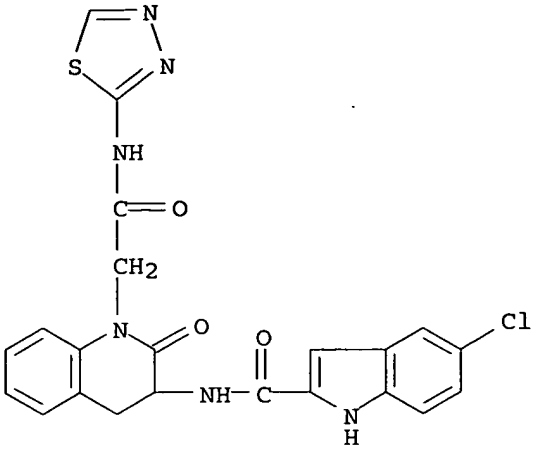
RN 599192-37-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[2-(methylsulfinyl)ethyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



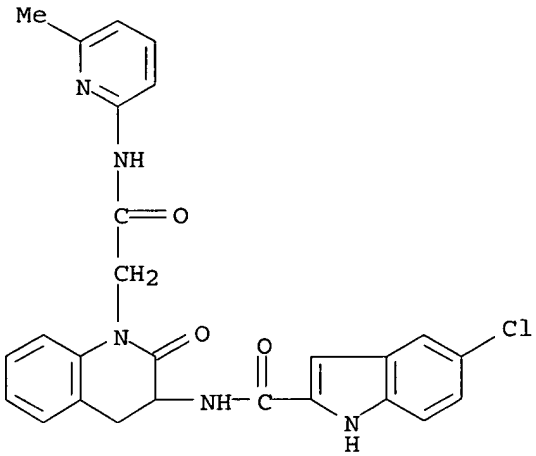
RN 599192-39-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[2-(methylsulfonyl)ethyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



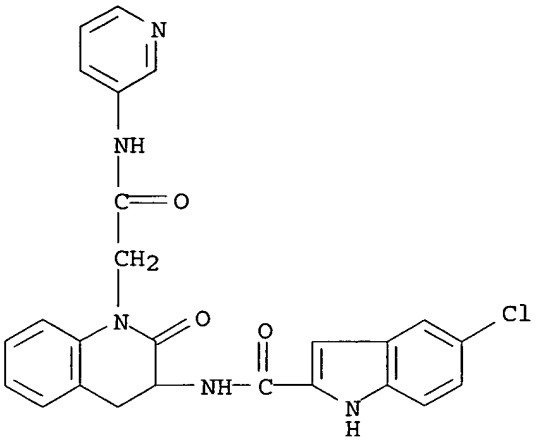
RN 599192-41-3 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-1,3,4-thiadiazol-2-yl- (9CI) (CA INDEX NAME)



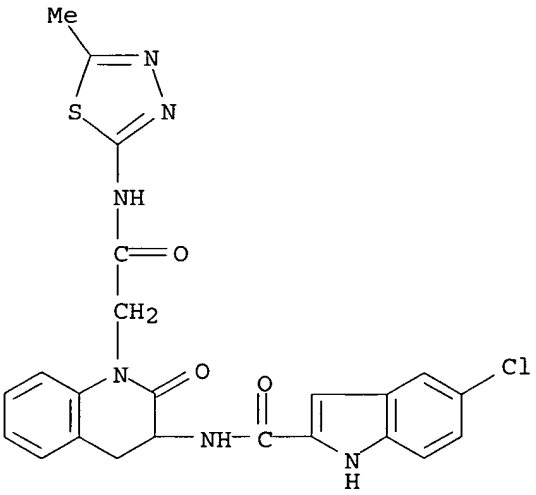
RN 599192-43-5 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(6-methyl-2-pyridinyl)-2-oxo- (9CI) (CA INDEX NAME)



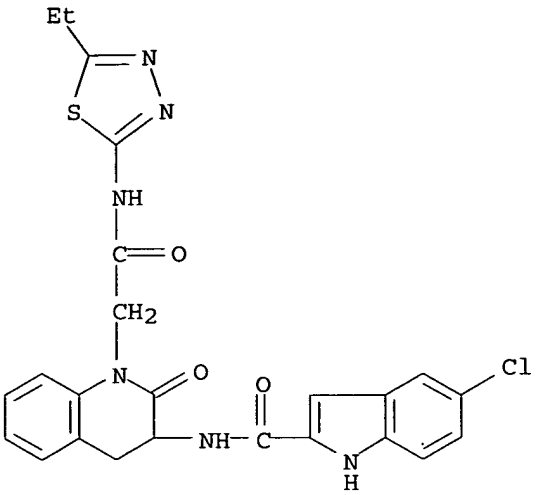
RN 599192-44-6 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-3-pyridinyl- (9CI) (CA INDEX NAME)



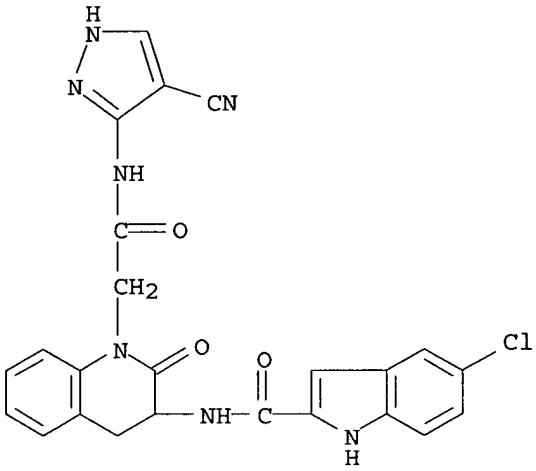
RN 599192-46-8 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(5-methyl-1,3,4-thiadiazol-2-yl)-2-oxo- (9CI) (CA INDEX NAME)



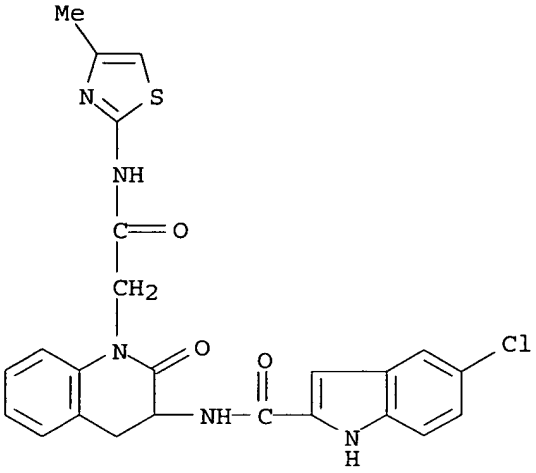
RN 599192-48-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(5-ethyl-1,3,4-thiadiazol-2-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



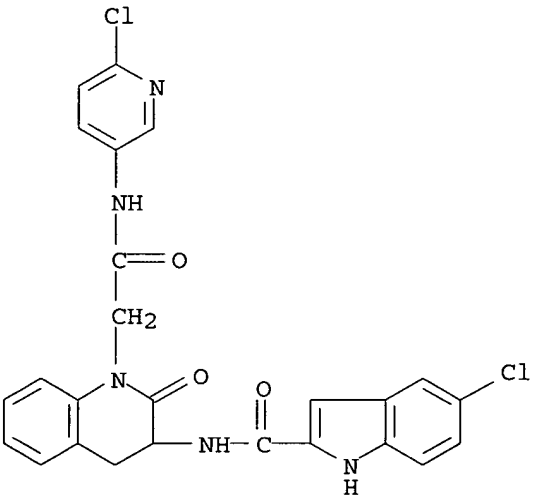
RN 599192-50-4 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(4-cyano-1H-pyrazol-3-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



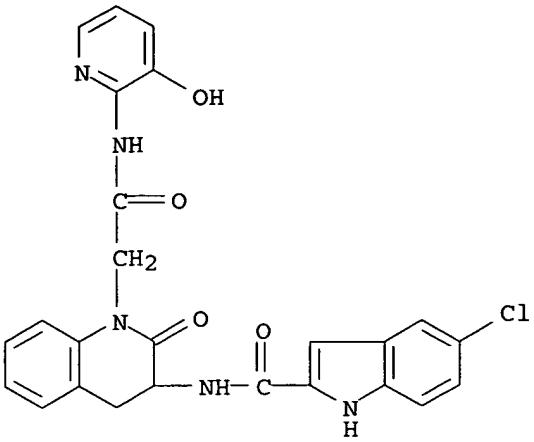
RN 599192-51-5 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(4-methyl-2-thiazolyl)-2-oxo- (9CI) (CA INDEX NAME)



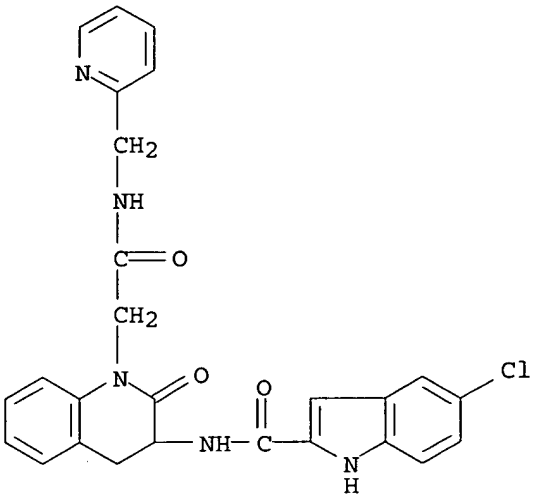
RN 599192-53-7 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(6-chloro-3-pyridinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



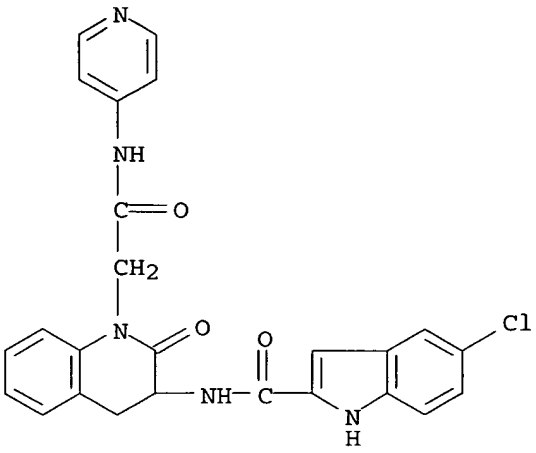
RN 599192-55-9 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(3-hydroxy-2-pyridinyl)-2-oxo- (9CI) (CA INDEX NAME)



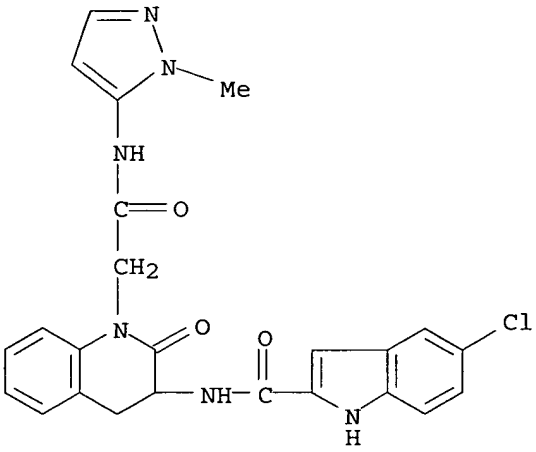
RN 599192-57-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-(2-pyridinylmethyl)- (9CI) (CA INDEX NAME)



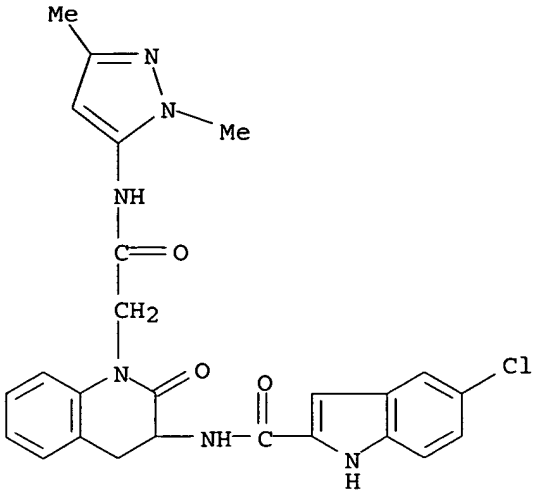
RN 599192-59-3 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-4-pyridinyl- (9CI) (CA INDEX NAME)



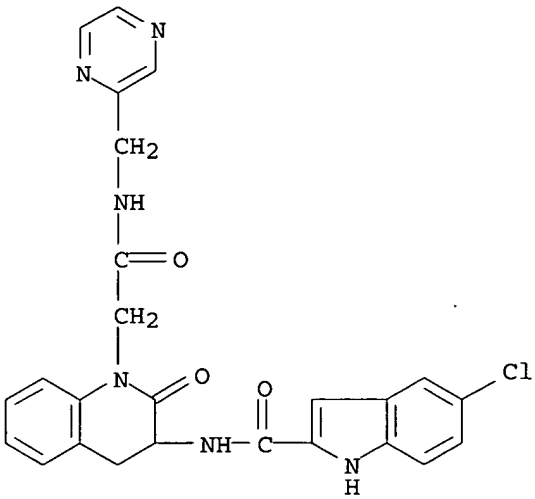
RN 599192-61-7 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(1-methyl-1H-pyrazol-5-yl)-2-oxo- (9CI) (CA INDEX NAME)



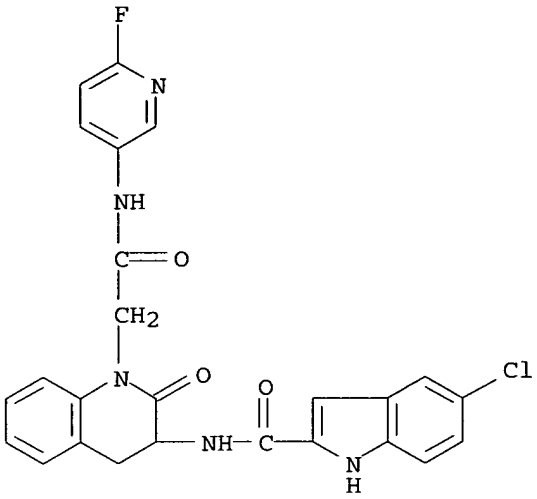
RN 599192-62-8 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(1,3-dimethyl-1H-pyrazol-5-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



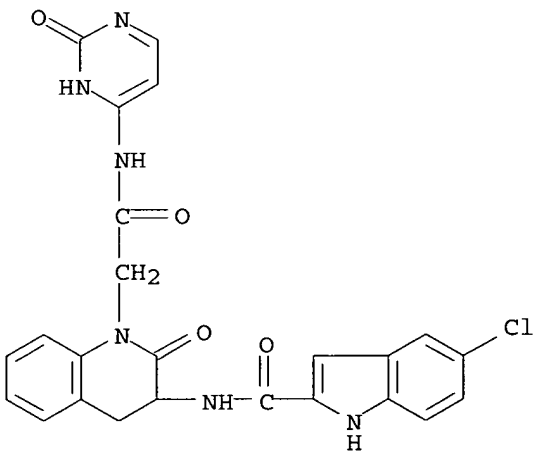
RN 599192-63-9 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-(pyrazinylmethyl)- (9CI) (CA INDEX NAME)



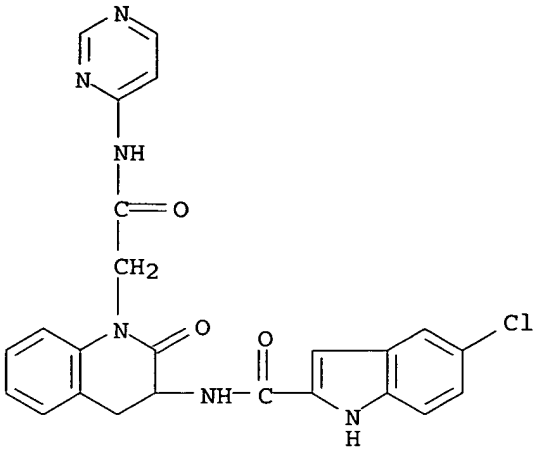
RN 599192-64-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(6-fluoro-3-pyridinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



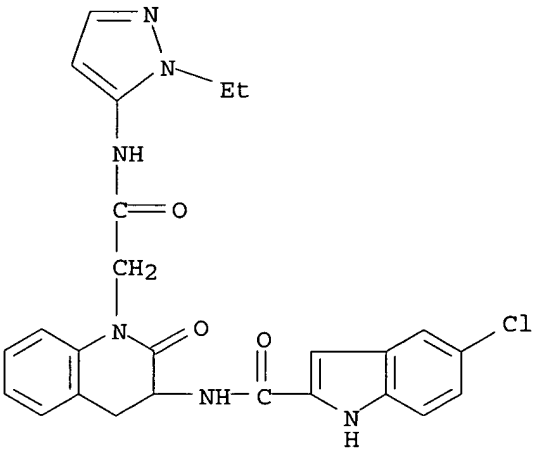
RN 599192-65-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(1,2-dihydro-2-oxo-4-pyrimidinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



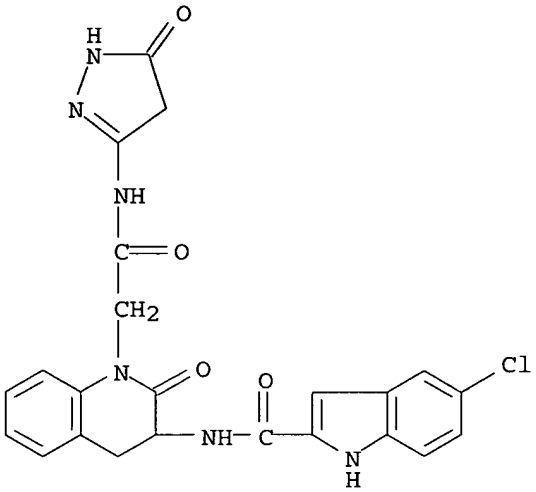
RN 599192-66-2 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-4-pyrimidinyl- (9CI) (CA INDEX NAME)



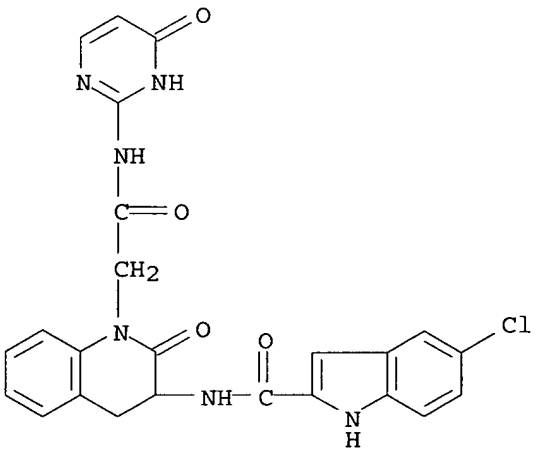
RN 599192-67-3 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(1-ethyl-1H-pyrazol-5-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



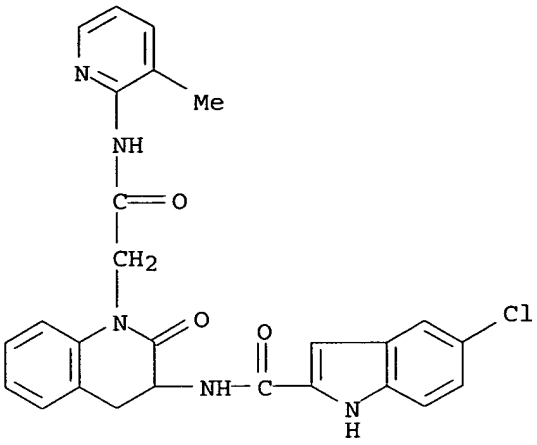
RN 599192-68-4 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(4,5-dihydro-5-oxo-1H-pyrazol-3-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



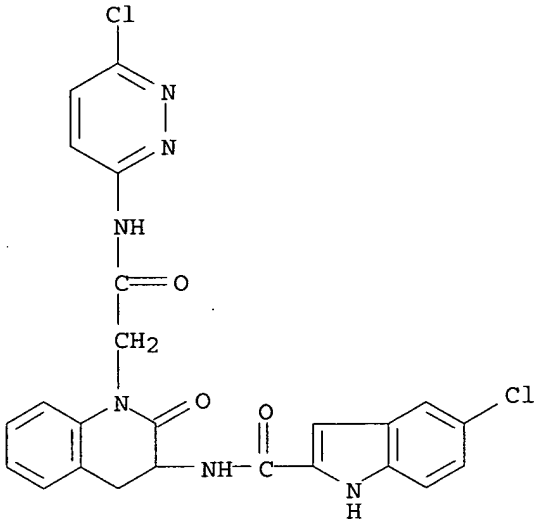
RN 599192-69-5 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(1,4-dihydro-4-oxo-2-pyrimidinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



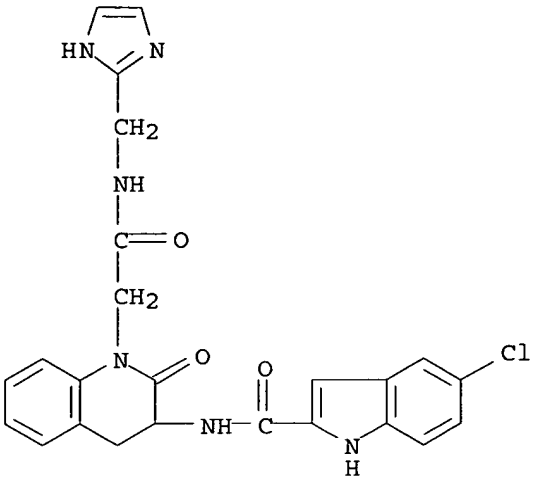
RN 599192-70-8 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(3-methyl-2-pyridinyl)-2-oxo- (9CI) (CA INDEX NAME)



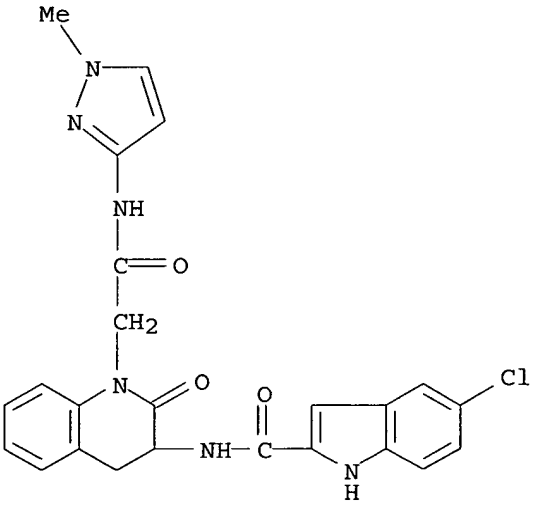
RN 599192-71-9 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(6-chloro-3-pyridazinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



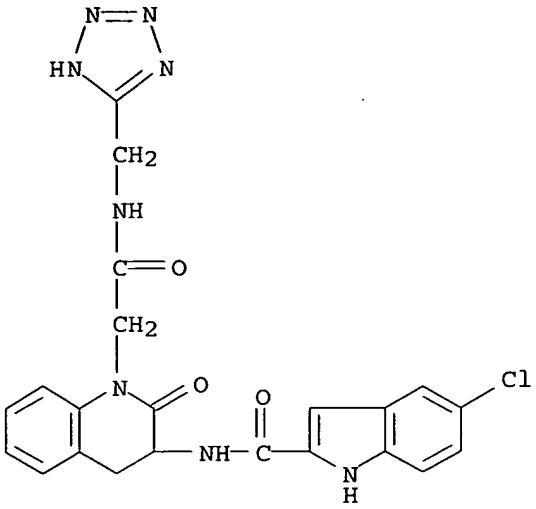
RN 599192-72-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(1H-imidazol-2-ylmethyl)-2-oxo- (9CI) (CA INDEX NAME)



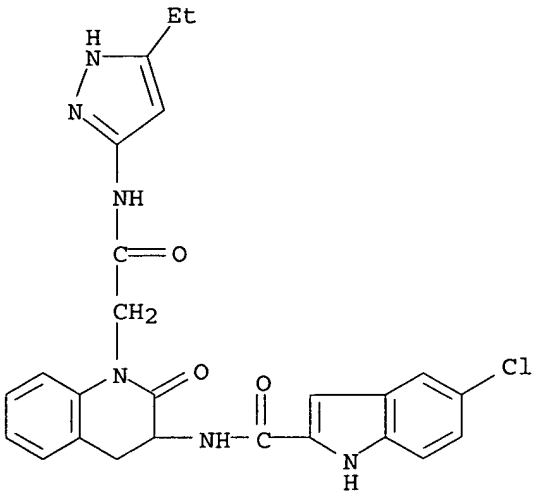
RN 599192-73-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(1-methyl-1H-pyrazol-3-yl)-2-oxo- (9CI) (CA INDEX NAME)



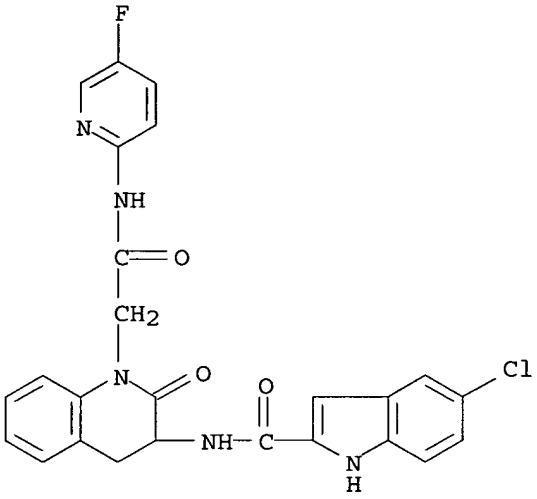
RN 599192-74-2 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-(1H-tetrazol-5-ylmethyl)- (9CI) (CA INDEX NAME)



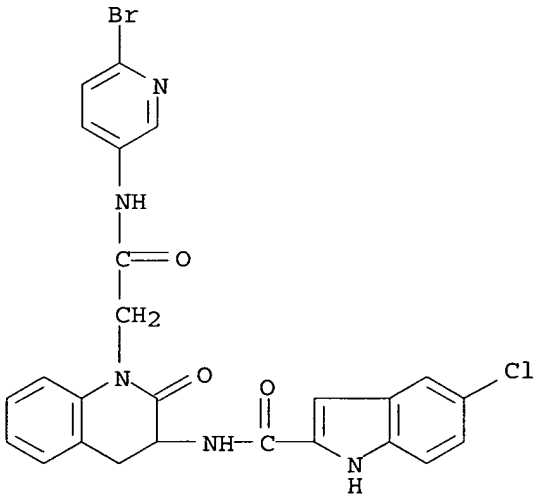
RN 599192-76-4 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(5-ethyl-1H-pyrazol-3-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



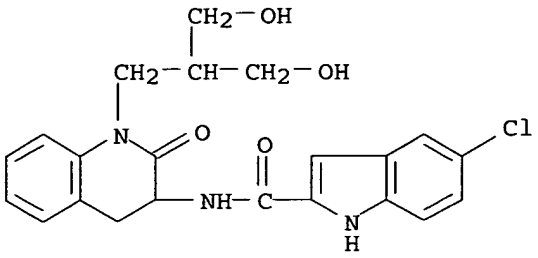
RN 599192-78-6 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(5-fluoro-2-pyridinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



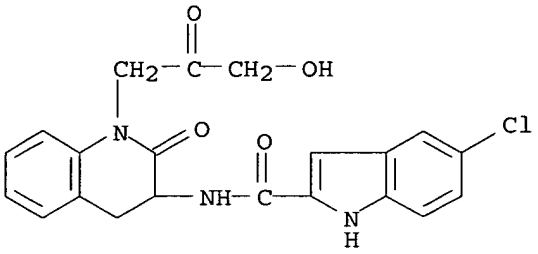
RN 599192-80-0 CAPLUS
CN 1(2H)-Quinolineacetamide, N-(6-bromo-3-pyridinyl)-3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



RN 599192-85-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[3-hydroxy-2-(hydroxymethyl)propyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

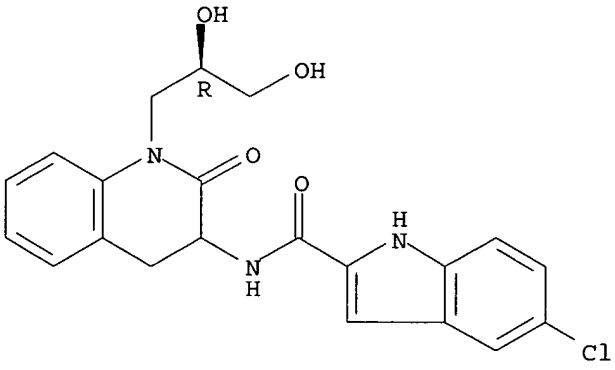


RN 599192-91-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-(3-hydroxy-2-oxopropyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

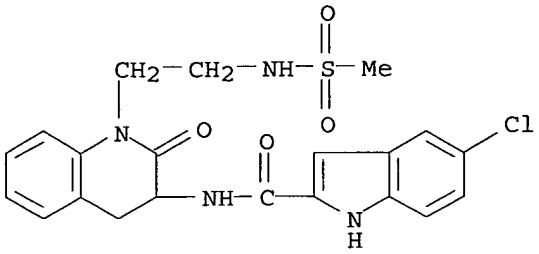


RN 599192-93-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[(2R)-2,3-dihydroxypropyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

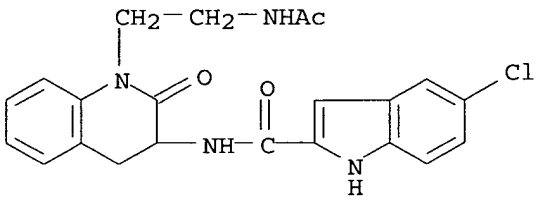
Absolute stereochemistry.



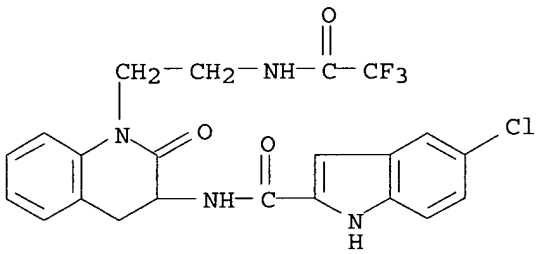
RN 599192-95-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[2-[(methylsulfonyl)amino]ethyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



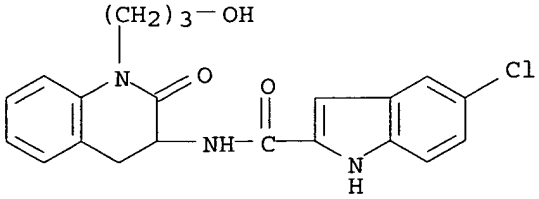
RN 599192-97-9 CAPLUS
CN 1H-Indole-2-carboxamide, N-[1-[2-(acetylamino)ethyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]-5-chloro- (9CI) (CA INDEX NAME)



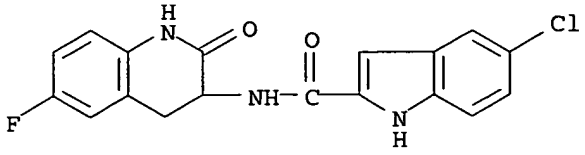
RN 599192-98-0 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-2-oxo-1-[2-[(trifluoroacetyl)amino]ethyl]-3-quinolinyl]- (9CI) (CA INDEX NAME)



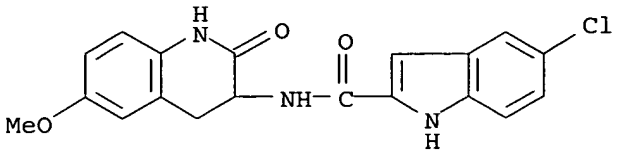
RN 599193-00-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-(3-hydroxypropyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



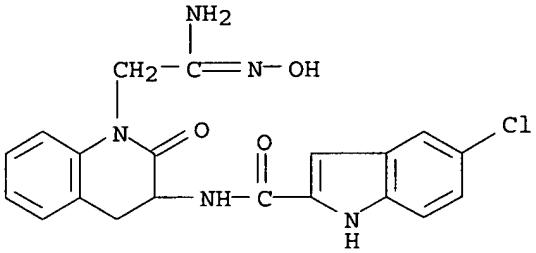
RN 599193-05-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(6-fluoro-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



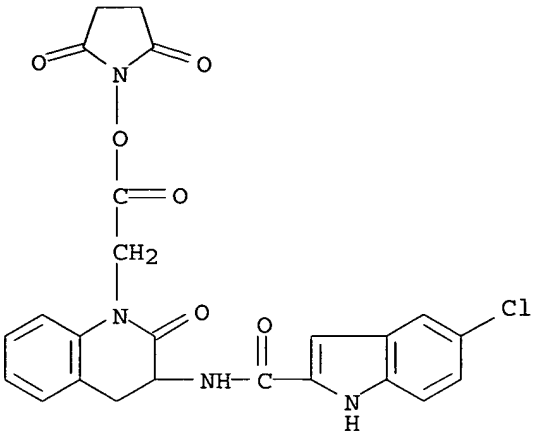
RN 599193-09-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-6-methoxy-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



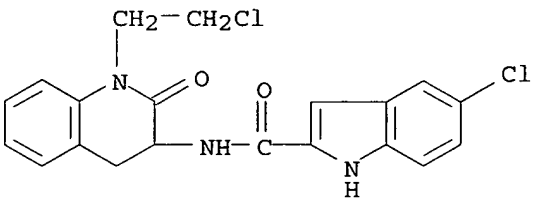
RN 600653-69-8 CAPLUS
CN 1H-Indole-2-carboxamide, N-[1-[(2Z)-2-amino-2-(hydroxyimino)ethyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]-5-chloro- (9CI) (CA INDEX NAME)



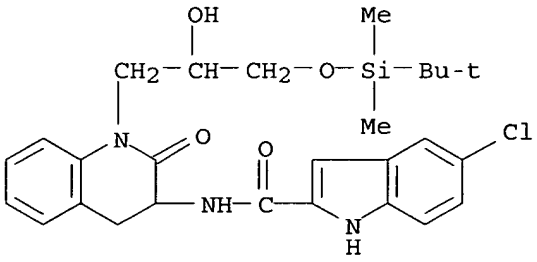
IT **599193-13-2P 599193-15-4P 599193-21-2P**
599193-23-4P 599193-28-9P 599193-30-3P
599193-32-5P 599193-36-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors)
RN 599193-13-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599193-15-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-(2-chloroethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

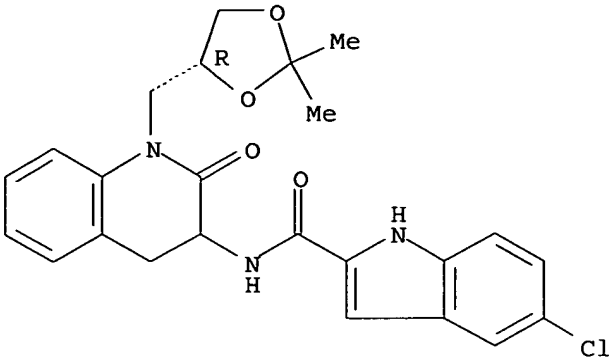


RN 599193-21-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxypropyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599193-23-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

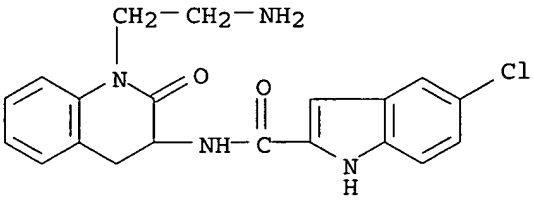
Absolute stereochemistry.



RN 599193-28-9 CAPLUS
CN 1H-Indole-2-carboxamide, N-[1-(2-aminoethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]-5-chloro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

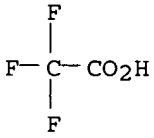
CM 1

CRN 599193-27-8
CMF C20 H19 Cl N4 O2

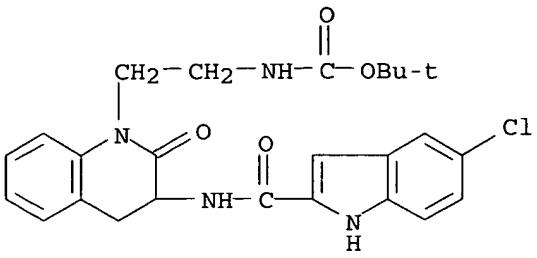


CM 2

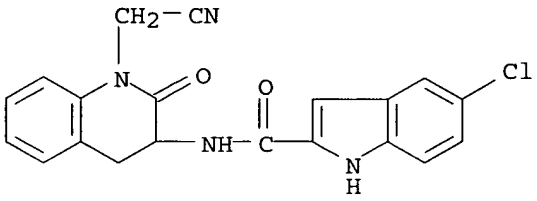
CRN 76-05-1
CMF C2 H F3 O2



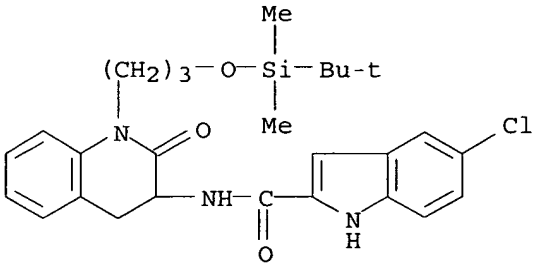
RN 599193-30-3 CAPLUS
CN Carbamic acid, [2-[3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-1(2H)-quinolinyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 599193-32-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599193-36-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



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L14	75	FILE BIOSIS
L15	66	FILE EMBASE
L16	79	FILE CAPLUS
TOTAL FOR ALL FILES		
L17	274	SHER P?/AU
L18	9	FILE MEDLINE
L19	10	FILE BIOSIS
L20	6	FILE EMBASE
L21	24	FILE CAPLUS

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

TOTAL FOR ALL FILES
L22 49 ELLSWORTH B?/AU

=> s l17 and l22
L23 0 FILE MEDLINE
L24 2 FILE BIOSIS
L25 0 FILE EMBASE
L26 7 FILE CAPLUS

TOTAL FOR ALL FILES
L27 9 L17 AND L22

=> s l27 not l12
L28 0 FILE MEDLINE
L29 2 FILE BIOSIS
L30 0 FILE EMBASE
L31 5 FILE CAPLUS

TOTAL FOR ALL FILES
L32 7 L27 NOT L12

=> dup rem l32
PROCESSING COMPLETED FOR L32
L33 7 DUP REM L32 (0 DUPLICATES REMOVED)

=> d ibib abs hitstr 1-7

L33 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:612299 CAPLUS
DOCUMENT NUMBER: 143:133380
TITLE: Preparation of azabicyclic heterocycles as cannabinoid receptor modulators
INVENTOR(S): Gu, Guixue; Ewing, William R.; Mikkilineni, Amarendra B.; Pendri, Annapurna; **Ellsworth, Bruce A.**; **Sher, Philip M.**; Gerritz, Samuel; Sun, Chongqing; Murugesan, Natesan; Wu, Ximao
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063762	A1	20050714	WO 2004-US42878	20041217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005171110	A1	20050804	US 2004-16198	20041217

PRIORITY APPLN. INFO.: US 2003-531451P P 20031219
US 2004-16198 A 20041217

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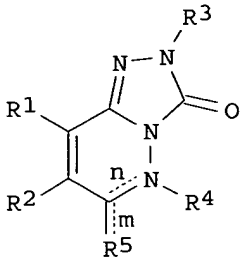

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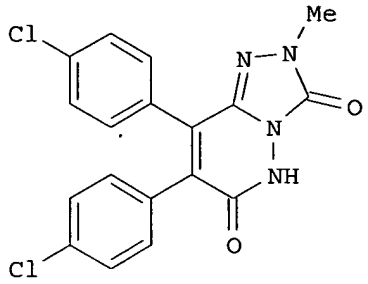

II

AB The present application describes compds. I [R1, R2 = halo, CN, alkyl, etc.; R3 = H alkyl, alkenyl, cycloalkyl, etc.; R4 is absent when n is a double bond; R4 = H, alkyl, cycloalkyl, etc.; R5 = halo, (un)substituted OH, NH2, etc. when m is a single bond; R5 = O when m = a double bond; m, n = a single or double bond; when m is a single bond, n is a double bond; when m is a double bond, n is a single bond], pharmaceutical compns. comprising at least one compound I and optionally one or more addnl. therapeutic agents and methods of treatment using the compds. I both alone and in combination with one or more addnl. therapeutic agents. Over 40 compds. I were prepared E.g., a multi-step synthesis of II, starting from dichloromandelic anhydride, was given. The exemplified compds. I showed the CB-1 receptor binding Ki values in the range of 0.01 nM to 10000 nM.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:572592 CAPLUS
DOCUMENT NUMBER: 143:97378
TITLE: Preparation of azabicyclic heterocycles as cannabinoid receptor modulators
INVENTOR(S): Yu, Guixue; Ewing, William R.; Mikkilineni, Amarendra B.; Pendri, Annapurna; **Sher, Philip M.**; Gerritz, Samuel; **Ellsworth, Bruce A.**; Wu, Gang; Huang, Yanting; Sun, Chongqing; Murugesan, Natesan; Gu, Zhengxiang; Wang, Ying; Sitkoff, Doree; Johnson, Stephen R.; Wu, Ximao
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 196 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005143381	A1	20050630	US 2004-16135	20041217
WO 2005063761	A1	20050714	WO 2004-US42820	20041217

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
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MR, NE, SN, TD, TG

WO 2005061509 A1 20050707 WO 2004-US42542 20041220
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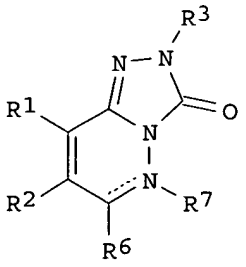
MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-531451P P 20031219
US 2004-16135 A 20041217

GI



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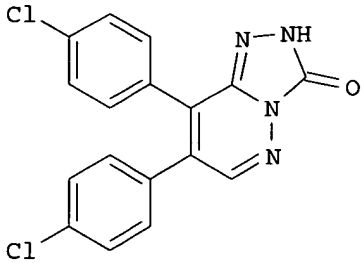

II

AB The present application describes compds. I [R1, R2 = halo, CN, alkyl, etc.; R3 = alkyl, alkenyl, cycloalkyl, etc.; R6 = H, alkyl, cycloalkyl, etc.; R7 is absent when double bond; or R7 = H, alkyl, cycloalkyl, etc.], pharmaceutical compns. comprising at least one compound I and optionally one or more addnl. therapeutic agents and methods of treatment using the compds. I both alone and in combination with one or more addnl. therapeutic agents. Over 400 compds. I were prepared E.g., a multi-step synthesis of II, starting from dibromopyridazinone, was given. Representative compds. I showed the CB-1 receptor binding Ki values in the range of 0.01 nM to 10000 nM.

L33 ANSWER 3 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:129879 BIOSIS
DOCUMENT NUMBER: PREV200300129879
TITLE: C-aryl glucoside SGLT2 inhibitors and method.
AUTHOR(S): **Ellsworth, Bruce** [Inventor, Reprint Author]; Washburn, William N. [Inventor]; **Sher, Philip M.** [Inventor]; Wu, Gang [Inventor]; Meng, Wei [Inventor]
CORPORATE SOURCE: ASSIGNEE: Bristol-Myers Squibb Company
PATENT INFORMATION: US 6515117 20030204
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Feb 4 2003) Vol. 1267, No. 1.

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

http://www.uspto.gov/web/menu/patdata.html. e-file.
ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Mar 2003
Last Updated on STN: 5 Mar 2003

AB An SGLT2 inhibiting compound is provided having the formula ##STR1## A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent.

L33 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:473244 CAPLUS
DOCUMENT NUMBER: 139:36736
TITLE: Preparation of C-aryl glucoside as antidiabetic agents and SGLT2 inhibitors
INVENTOR(S): Washburn, William N.; **Ellsworth, Bruce**; Meng, Wei; Wu, Gang; **Sher, Philip M.**
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 42 pp., Cont. of U.S. Ser. No. 805,341, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003114390	A1	20030619	US 2002-264410	20021004
PRIORITY APPLN. INFO.:			US 2001-805341	B1 20010313

OTHER SOURCE(S): MARPAT 139:36736
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Sodium dependent glucose transporters found in the intestine and kidney (SGLT2) inhibiting C-aryl glucoside compds. I where R1, R2, and R2a are independently hydrogen, OH, OR5, lower alkyl, CF3, OCHF2, OCF3, SR5i or halogen, or two of R1, R2 and R2a together with the carbons to which they are attached can form an annelated five, six or seven membered carbocycle or heterocycle; R3 and R4 are independently hydrogen, OH, OR5a, O-aryl, OCH2Aryl, lower alkyl, cycloalkyl, CF3, -OCHF2, -OCF3, halogen, -CN, -CO2R5b, -CO2H, -COR6b, -CH(OH)R6c, -CH(OR5h)R6d, -CONR6R6a, -NHCOR5c, -NHSO2R5d, -NHSO2Aryl, Aryl, -SR5e, -SOR5f, SO2R5g, SO2Aryl, or a five, six or seven membered heterocycle, or R3 and R4 together with the carbons to which they are attached form an annelated five, six or seven membered carbocycle or heterocycle; R5, R5a, R5b, R5c, R5d, R5e, R5f, R5g, R5h, and R5I are independently lower alkyl; R6, R6a, R6b, R6c and R6d are independently hydrogen, alkyl, aryl, alkylaryl or cycloalkyl, or R6 and R6a together with the nitrogen to which they are attached form an annelated five, six or seven membered heterocycle; A is O, S, NH, or (CH2)n where n is 0-3. A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent. Thus, II was prepared as an antidiabetic agent other than an SGLT2 inhibitor, an agent for treating the complications of

diabetes, an anti-obesity agent, an antihypertensive agent, an antiplatelet agent, an antiatherosclerotic agent, and/or a lipid-lowering agent (no data).

L33 ANSWER 5 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2002:435032 BIOSIS
DOCUMENT NUMBER: PREV200200435032
TITLE: C-aryl glucoside SGLT2 inhibitors and method.
AUTHOR(S): **Ellsworth, Bruce** [Inventor, Reprint author]; Washburn, William N. [Inventor]; **Sher, Philip M.** [Inventor]; Wu, Gang [Inventor]; Meng, Wei [Inventor]
CORPORATE SOURCE: Princeton, NJ, USA
ASSIGNEE: Bristol-Myers Squibb Company
PATENT INFORMATION: US 6414126 20020702
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (July 2, 2002) Vol. 1260, No. 1. http://www.uspto.gov/web/menu/patdata.html. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 14 Aug 2002
Last Updated on STN: 14 Aug 2002

AB SGLT2 inhibiting compounds are provided having the formula ##STR1## where R1, R2, and R2a are independently hydrogen, OH, OR5, lower alkyl, CF3, OCHF2, OCF3, SR5i or halogen, or two of R1, R2 and R2a together with the carbons to which they are attached can form an annelated five, six or seven membered carbocycle or heterocycle; R3 and R4 are independently hydrogen, OH, OR5a, OAryl, OCH2 Aryl, lower alkyl, cycloalkyl, CF3, --OCHF2, --OCF3, halogen, --CN, --CO2 R5b, --CO2 H, --COR6b, --CH(OH)R6c, --CH(OR5h)R6d, --CONR6 R6a, --NHCOR5c, --NHSO2 R5d, --NHSO2 Aryl, Aryl, --SR5e, --SOR5f, --SO2 R5g, --SO2 Aryl, or a five, six or seven membered heterocycle, or R3 and R4 together with the carbons to which they are attached form an annelated five, six or seven membered carbocycle or heterocycle; R5, R5a, R5b, R5c, R5d, R5e, R5f, R5g, R5h and R5i are independently lower alkyl; R6, R6a, R6b, R6c and R6d are independently hydrogen, alkyl,aryl, alkylaryl or cycloalkyl, or R6 and R6a together with the nitrogen to which they are attached form an annelated five, six or seven membered heterocycle; A is O, S, NH, or (CH2)n where n is 0-3. A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent.

L33 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:736927 CAPLUS
DOCUMENT NUMBER: 137:247879
TITLE: Preparation of antidiabetic agents C-aryl glucoside as human SGLT2 inhibitors
INVENTOR(S): **Ellsworth, Bruce**; Washburn, William N.; **Sher, Philip M.**; Wu, Gang; Meng, Wei
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. 6,414,126.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 2002137903		A1	20020926	US 2002-151436	20020520
US 6515117		B2	20030204		
US 6414126		B1	20020702	US 2000-679027	20001004
ZA 2002002604		A	20030703	ZA 2002-2604	20020403
CA 2486539		AA	20031204	CA 2003-2486539	20030515
WO 2003099836		A1	20031204	WO 2003-US15591	20030515
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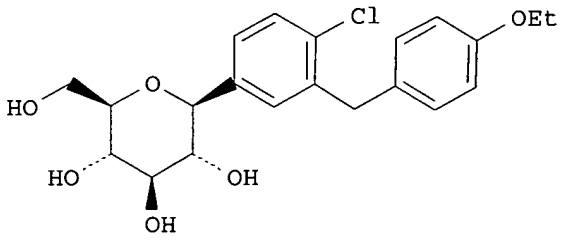
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1506211		A1	20050216	EP 2003-736643	20030515
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003011323		A	20050315	BR 2003-11323	20030515
PRIORITY APPLN. INFO.:				US 1999-158773P	P 19991012
				US 2000-194615P	P 20000405
				US 2000-679027	A2 20001004
				US 2002-151436	A 20020520
				WO 2003-US15591	W 20030515

GI



I

AB An SGLT2 inhibiting compound is provided having the formula I method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent (no data). 1A pharmaceutical combination comprising an SGLT2 inhibitor compound and an antidiabetic agent other than an SGLT2 inhibitor, for treating the complications of diabetes, an anti-obesity agent, an antihypertensive agent, an antiplatelet agent, an antiatherosclerotic agent, and/or a lipid-lowering agent (no data). A method for treating or delaying the progression or onset of diabetes, diabetic retinopathy, diabetic neuropathy, diabetic nephropathy, delayed wound healing, insulin resistance, hyperglycemia, hyperinsulinemia, elevated blood levels of fatty acids or glycerol, hyperlipidemia, obesity, hypertriglyceridemia, Syndrome X, diabetic complications, atherosclerosis or hypertension, or for increasing high d. lipoprotein levels, which comprises administering to a mammalian species in need of treatment a therapeutically effective amount of a compd (no data).

L33 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:283970 CAPLUS
DOCUMENT NUMBER: 134:281069

TITLE: Preparation of C-aryl glucoside SGLT2 inhibitors
INVENTOR(S): **Ellsworth, Bruce**; Washburn, William N.; **Sher, Philip M.**; Wu, Gang; Meng, Wei
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001027128	A1	20010419	WO 2000-US27187		20001002
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2388818	AA	20010419	CA 2000-2388818		20001002
TR 200200986	T2	20020722	TR 2002-200200986		20001002
EP 1224195	A1	20020724	EP 2000-968595		20001002
EP 1224195	B1	20050518			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL					
BR 2000014722	A	20030225	BR 2000-14722		20001002
JP 2003511458	T2	20030325	JP 2001-530346		20001002
NZ 518029	A	20040827	NZ 2000-518029		20001002
AU 781009	B2	20050428	AU 2000-78483		20001002
AT 295848	E	20050615	AT 2000-968595		20001002
ZA 2002002604	A	20030703	ZA 2002-2604		20020403
NO 2002001721	A	20020610	NO 2002-1721		20020411
PRIORITY APPLN. INFO.:			US 1999-158773P	P	19991012
			US 2000-194615P	P	20000405
			WO 2000-US27187	W	20001002

OTHER SOURCE(S): MARPAT 134:281069
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Sodium dependent glucose transporters found in the intestine and kidney (SGLT2) inhibiting C-aryl glucoside compds. I where R1, R2, and R2a are independently hydrogen, OH, OR5, lower alkyl, CF3, OCHF2, OCF3, SR5i or halogen, or two of R1, R2 and R2a together with the carbons to which they are attached can form an annelated five, six or seven membered carbocycle or heterocycle; R3 and R4 are independently hydrogen, OH, OR5a, O-aryl, OCH2Aryl, lower alkyl, cycloalkyl, CF3, -OCHF2, -OCF3, halogen, -CN, -CO2R5b, -CO2H, -COR6b, -CH(OH)R6c, -CH(OR5h)R6d, -CONR6R6a, -NHCOR5c, -NHSO2R5d, -NHSO2Aryl, Aryl, -SR5e, -SOR5f, SO2R5g, SO2Aryl, or a five, six or seven membered heterocycle, or R3 and R4 together with the carbons to which they are attached form an annelated five, six or seven membered carbocycle or heterocycle; R5, R5a, R5b, R5c, R5d, R5e, R5f, R5g, R5h, and R5I are independently lower alkyl; R6, R6a, R6b, R6c and R6d are

independently hydrogen, alkyl, aryl, alkylaryl or cycloalkyl, or R6 and R6a together with the nitrogen to which they are attached form an annelated five, six or seven membered heterocycle; A is O, S, NH, or (CH2)n where n is 0-3. A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent. Thus, II was prepared as an antidiabetic agent other than an SGLT2 inhibitor, an agent for treating the complications of diabetes, an anti-obesity agent, an antihypertensive agent, an antiplatelet agent, an antiatherosclerotic agent, and/or a lipid-lowering agent (no data).

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	52.01	293.95

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-6.57	-6.57

FILE 'REGISTRY' ENTERED AT 10:01:01 ON 30 AUG 2005

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 AUG 2005 HIGHEST RN 862072-85-3
DICTIONARY FILE UPDATES: 29 AUG 2005 HIGHEST RN 862072-85-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*
****

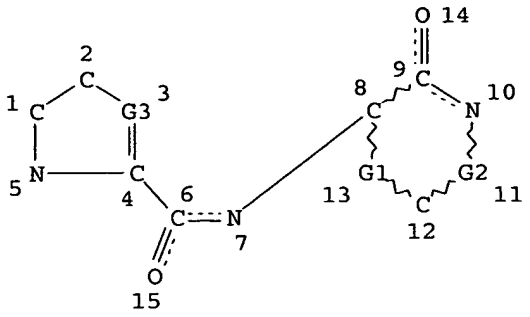
Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> => d l41 que stat

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

L39 STR



CH—S @16 @17 CH—O @18 @19 CH2·CH @23 @24

CH—C═O @20 @21 22

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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 3123 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

=> dis his ful

(FILE 'HOME' ENTERED AT 09:49:47 ON 30 AUG 2005)

FILE 'REGISTRY' ENTERED AT 09:49:57 ON 30 AUG 2005
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L2 2 SEA SSS SAM L1
L3 97 SEA SSS FUL L1
L4 STR
L5 0 SEA SUB=L3 SSS FUL L4
L6 STR L1
L7 0 SEA SUB=L3 SSS FUL L6
D L5 QUE STAT
D L7 QUE STAT
D L3 QUE STAT

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 09:56:26 ON 30 AUG 2005
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L9 0 SEA ABB=ON PLU=ON L3
L10 0 SEA ABB=ON PLU=ON L3
L11 4 SEA ABB=ON PLU=ON L3
TOTAL FOR ALL FILES

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

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                  D 1-4 IBIB ABS HITSTR
L13            54 SEA ABB=ON  PLU=ON  SHER P?/AU
L14            75 SEA ABB=ON  PLU=ON  SHER P?/AU
L15            66 SEA ABB=ON  PLU=ON  SHER P?/AU
L16            79 SEA ABB=ON  PLU=ON  SHER P?/AU
     TOTAL FOR ALL FILES
L17           274 SEA ABB=ON  PLU=ON  SHER P?/AU
L18             9 SEA ABB=ON  PLU=ON  ELLSWORTH B?/AU
L19            10 SEA ABB=ON  PLU=ON  ELLSWORTH B?/AU
L20             6 SEA ABB=ON  PLU=ON  ELLSWORTH B?/AU
L21            24 SEA ABB=ON  PLU=ON  ELLSWORTH B?/AU
     TOTAL FOR ALL FILES
L22            49 SEA ABB=ON  PLU=ON  ELLSWORTH B?/AU
L23             0 SEA ABB=ON  PLU=ON  L13 AND L18
L24             2 SEA ABB=ON  PLU=ON  L14 AND L19
L25             0 SEA ABB=ON  PLU=ON  L15 AND L20
L26             7 SEA ABB=ON  PLU=ON  L16 AND L21
     TOTAL FOR ALL FILES
L27             9 SEA ABB=ON  PLU=ON  L17 AND L22
L28             0 SEA ABB=ON  PLU=ON  L23 NOT L8
L29             2 SEA ABB=ON  PLU=ON  L24 NOT L9
L30             0 SEA ABB=ON  PLU=ON  L25 NOT L10
L31             5 SEA ABB=ON  PLU=ON  L26 NOT L11
     TOTAL FOR ALL FILES
L32             7 SEA ABB=ON  PLU=ON  L27 NOT L12
L33             7 DUP REM L32 (0 DUPLICATES REMOVED)
                  D IBIB ABS HITSTR 1-7

     FILE 'REGISTRY' ENTERED AT 10:01:01 ON 30 AUG 2005
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L36               STR L34
L37             0 SEA SSS SAM L36
L38             0 SEA SSS FUL L36
L39               STR L36
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                  D L41 QUE STAT


     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   29 AUG 2005  HIGHEST RN 862072-85-3
     DICTIONARY FILE UPDATES:  29 AUG 2005  HIGHEST RN 862072-85-3

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

       Please note that search-term pricing does apply when
       conducting SmartSELECT searches.

     ******************************************************************
     *                                                                *
     * The CA roles and document type information have been removed from *
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* the IDE default display format and the ED field has been added,    *
* effective March 20, 2005.  A new display format, IDERL, is now     *
* available and contains the CA role and document type information.  *
*                                                                    *
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Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

FILE MEDLINE
 FILE LAST UPDATED: 27 AUG 2005 (20050827/UP).  FILE COVERS 1950 TO DATE.

 On December 19, 2004, the 2005 MeSH terms were loaded.

 The MEDLINE reload for 2005 is now available.  For details enter HELP
 RLOAD at an arrow promt (=>).  See also:

    http://www.nlm.nih.gov/mesh/
    http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

 OLDMEDLINE now back to 1950.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2005 vocabulary.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 25 August 2005 (20050825/ED)

FILE RELOADED: 19 October 2003.

FILE EMBASE
 FILE COVERS 1974 TO 25 Aug 2005 (20050825/ED)

 EMBASE has been reloaded. Enter HELP RLOAD for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

FILE CAPLUS

Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyr
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medl,biosis,embase,caplus;s l3

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     FILE 'REGISTRY' ENTERED AT 09:49:57 ON 30 AUG 2005
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L2            2 S L1
L3           97 S L1 FUL
L4              STR
L5            0 SEARCH L4  SUB=L3 FUL
L6              STR L1
L7            0 SEARCH L6  SUB=L3 FUL


L1              STR
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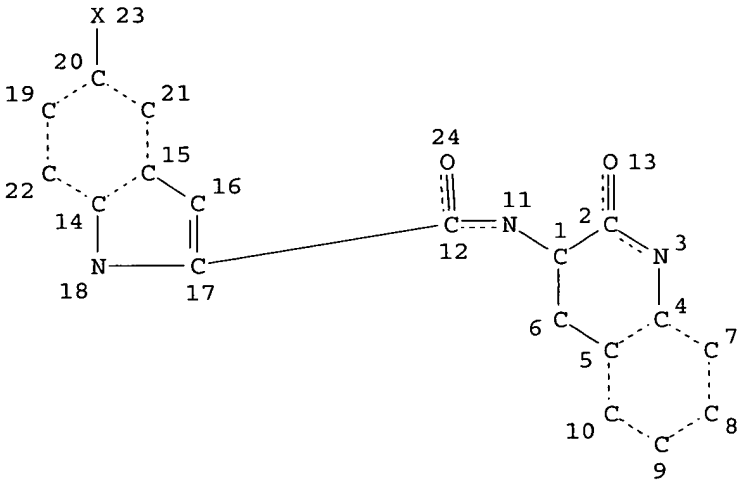


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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  24

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L4              STR
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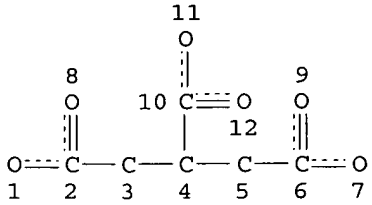


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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:


Prepared by: Mary Hale @2-2507 Rem Bldg 1D86
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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
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SEARCH TIME: 00.00.01

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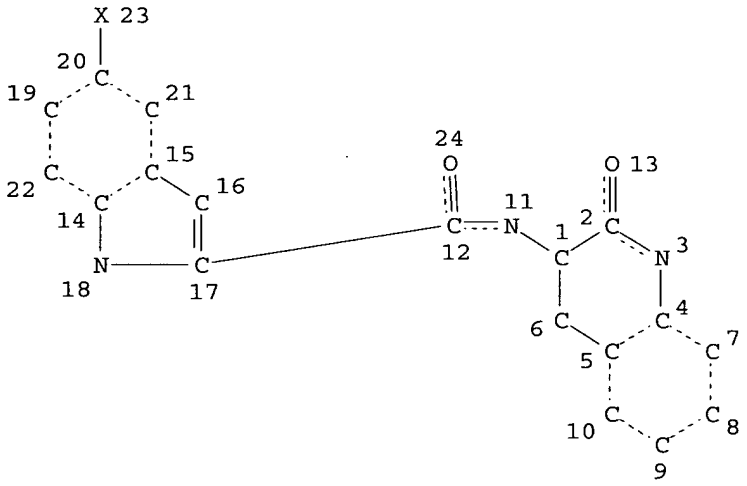

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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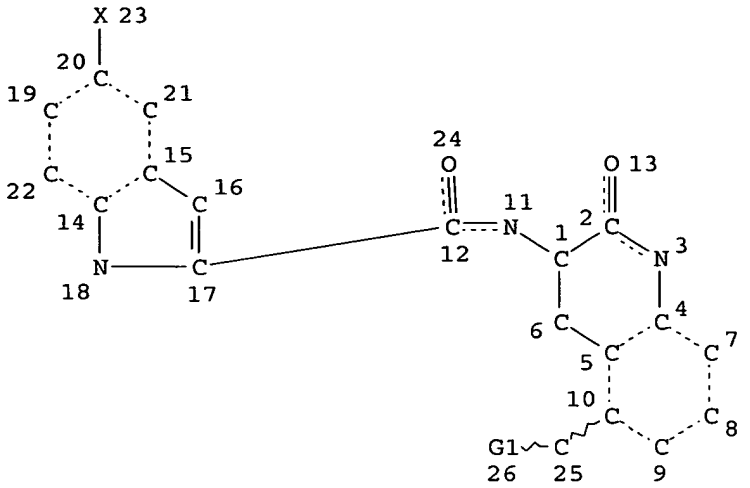
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
L3 97 SEA FILE=REGISTRY SSS FUL L1
L6 STR

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



Page 1-A

CH2·CH
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Page 2-A
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DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE
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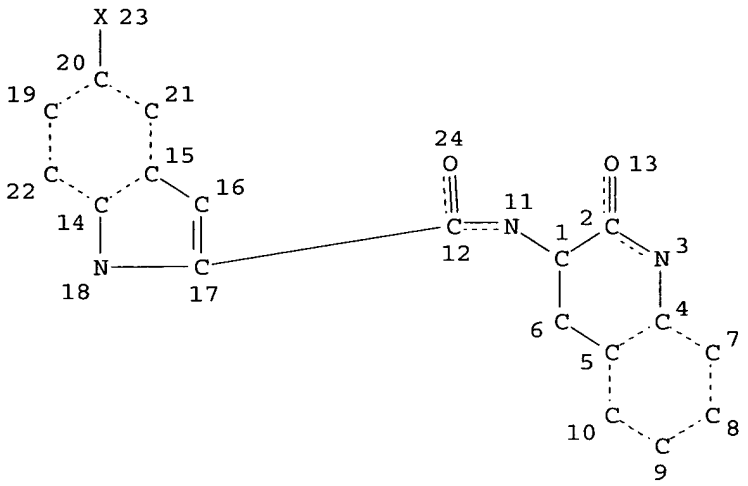
100.0% PROCESSED 97 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L1 STR

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



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NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
L3 97 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 310 ITERATIONS 97 ANSWERS
SEARCH TIME: 00.00.01

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	241.73	241.94

FILE 'MEDLINE' ENTERED AT 09:56:26 ON 30 AUG 2005

FILE 'BIOSIS' ENTERED AT 09:56:26 ON 30 AUG 2005

FILE 'EMBASE' ENTERED AT 09:56:26 ON 30 AUG 2005

FILE 'CAPLUS' ENTERED AT 09:56:26 ON 30 AUG 2005

L8 0 FILE MEDLINE
L9 0 FILE BIOSIS
L10 0 FILE EMBASE
L11 4 FILE CAPLUS

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

TOTAL FOR ALL FILES
L12 4 L3

=> d 1-4 ibib abs hitstr;s sher p?/au;s ellsworth b?/au

L12 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:589248 CAPLUS
DOCUMENT NUMBER: 141:140474
TITLE: Triglyceride and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compounds
INVENTOR(S): Sher, Philip M.; Ellsworth, Bruce A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 43 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004142938	A1	20040722	US 2003-712823		20031113
PRIORITY APPLN. INFO.:			US 2002-426465P	P	20021114

OTHER SOURCE(S): MARPAT 141:140474
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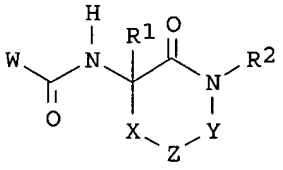

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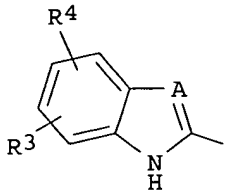

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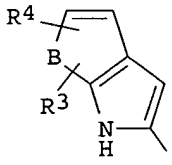

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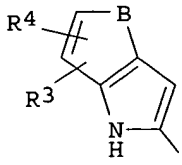


= W3

AB Prodrugs of glycogen phosphorylase inhibiting compds. are provided, said prodrug compds., G(-O2CR')m(-OH)n(-O2C(CH2)pCH3)q [G = branched or straight C3-5-carbon chain and (-O2CR'), (-OH) and (-O2C(CH2)pCH3) are attached to any available carbon atom along G; m = 1 - 4; n = 0 - 3; p = 0 - 16; q = 0 - 3; where m + n + q = 3 or 4; and -O2CR' is a fragment of a compound I wherein W = W1, W2, W3; X = O, S, SO2, CHR5, , CHR5O, CHR5S, CHR5SO2, CHR5CO, CH2CHR5; Y = bond, CHR6; Z = aryl, heteroaryl; R1 =H, alkyl, alkenyl; R2 = H, alkyl, aryl, arylalkyl, heteroarylalkyl, alkenyl; R3, R4 = H, halo, CF3, CN, alkyl, alkoxy; R5, R6 = H, alkyl, aryl, alkenyl, CN, CN4R9A (tetrazole), CO2R9A, CONR9AR9B, CONR9AOR9B; A = CH, N;

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

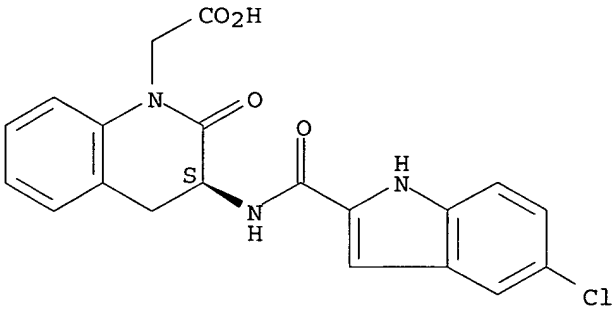
B = O, S; wherein R1, R2, R5, R6, R7, R8 = alkyl, aryl, alkenyl, arylalkyl,heteroarylalkyl, alkoxy, aryloxy and each may be substituted with 1 - 3 hydrogen bonding groups]. Thus, 3-[(5-chloroindolecarbonyl)amino]-3,4-dihydrocarbostyril I (R1 = R2 = H, W = 5-chloroindole, X = CH2, YZ = benzo) was prepared from 3-amino-3,4-dihydrocarbostyril via acylation with 5-chloroindolecarboxylic acid resin-bound 2,3,5,6-tetrafluorophenyl ester. Further provided are pharmaceutical compns. and methods for treating diabetes and related diseases employing compds. above, either alone or in combination with another therapeutic agent.

IT **639478-19-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and borane reduction of; preparation of triglyceride and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)

RN 639478-19-6 CAPLUS

CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

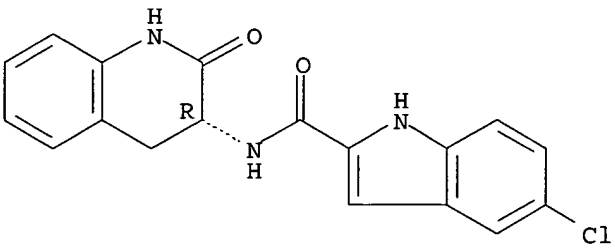


IT **639478-14-1P 639478-15-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and regioselective cyanomethylation of; preparation of triglyceride
and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)

RN 639478-14-1 CAPLUS

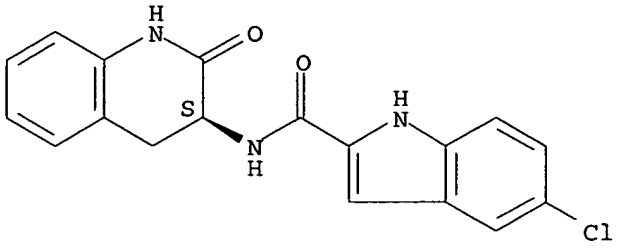
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



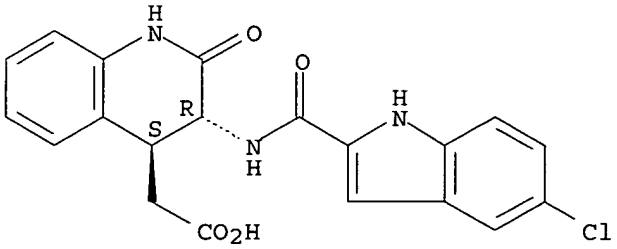
RN 639478-15-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

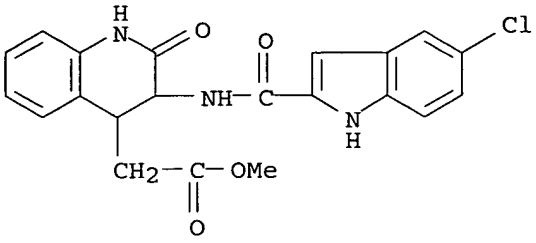


IT **639478-48-1P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and resolution of; preparation of triglyceride and triglyceride-like
prodrugs of glycogen phosphorylase inhibiting compds.)
RN 639478-48-1 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

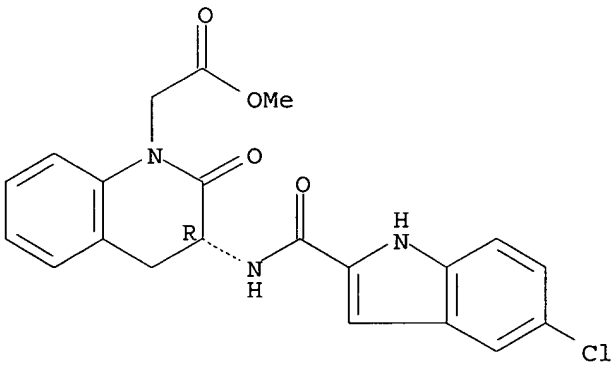


IT **724783-46-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and saponification of; preparation of triglyceride and triglyceride-like
prodrugs of glycogen phosphorylase inhibiting compds.)
RN 724783-46-4 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester (9CI) (CA INDEX NAME)



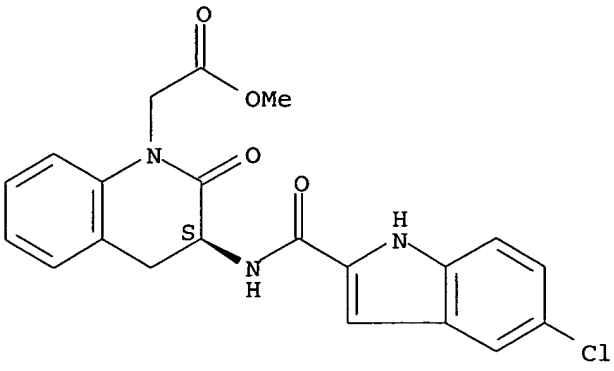
IT **639478-16-3P 639478-17-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and saponification or amidation of; preparation of triglyceride and
triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)
RN 639478-16-3 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-17-4 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

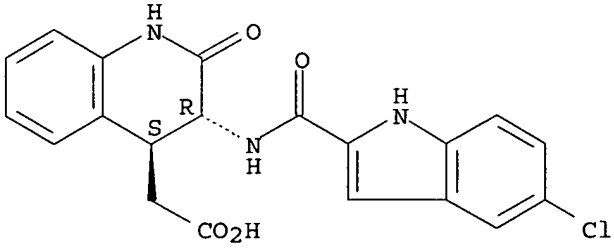
Absolute stereochemistry.



IT **639478-49-2P 639478-95-8P 724783-48-6P**
RL: PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of triglyceride and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)

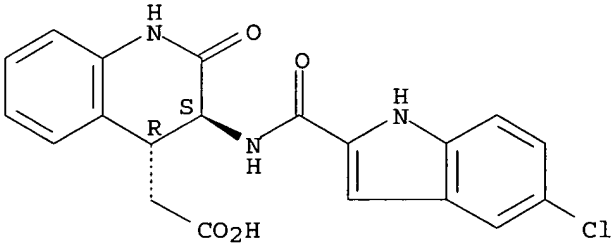
RN 639478-49-2 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-95-8 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3S,4R)- (9CI) (CA INDEX NAME)

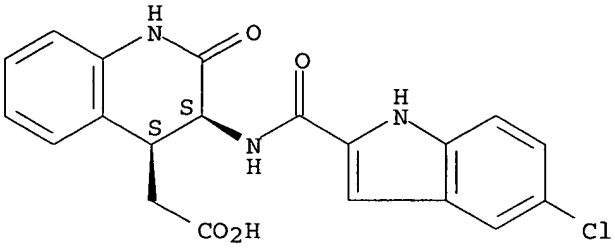
Absolute stereochemistry.



RN 724783-48-6 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4R)-rel- (9CI) (CA INDEX NAME)

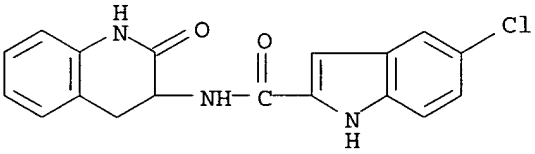
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

Relative stereochemistry.

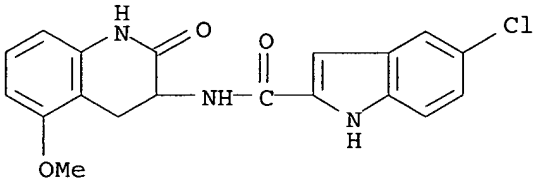


IT **599192-33-3P 639478-12-9P 639478-18-5P**
639478-20-9P 639478-21-0P 639478-22-1P
639478-25-4P 639478-26-5P 639478-27-6P
639478-46-9P 639478-47-0P 639478-50-5P
652142-54-6P 652142-55-7P 724783-27-1P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of triglyceride and triglyceride-like prodrugs of glycogen phosphorylase inhibiting compds.)

RN 599192-33-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)

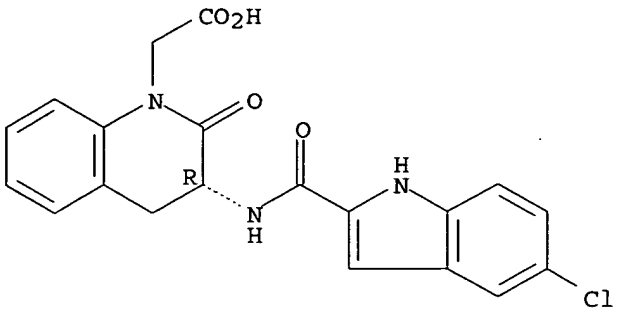


RN 639478-12-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-5-methoxy-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



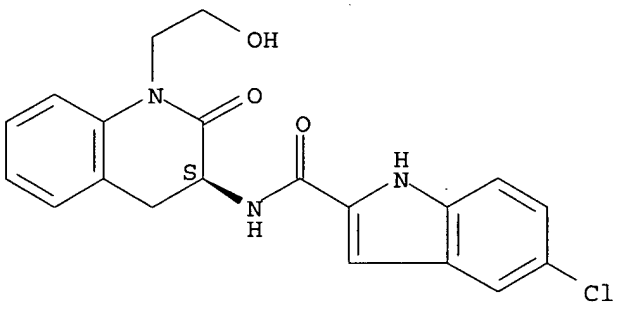
RN 639478-18-5 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



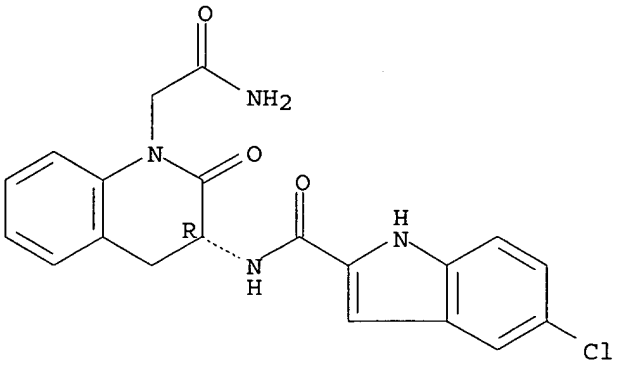
RN 639478-20-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-(2-hydroxyethyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-21-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3R)- (9CI) (CA INDEX NAME)

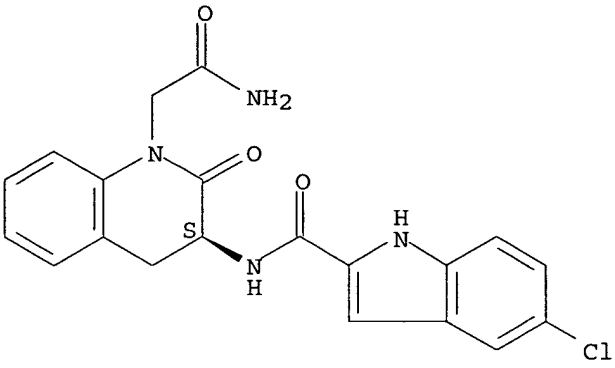
Absolute stereochemistry.



RN 639478-22-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3S)- (9CI) (CA INDEX NAME)

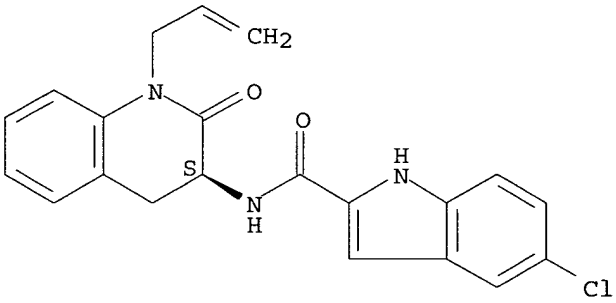
Absolute stereochemistry.

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



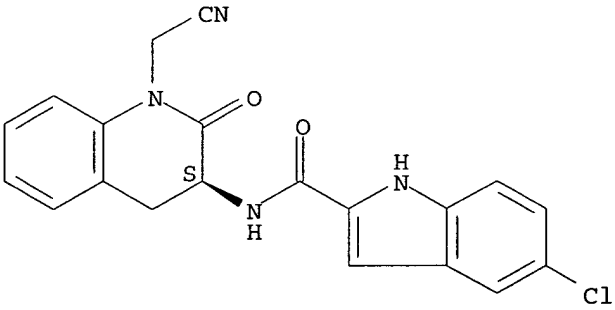
RN 639478-25-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-1-(2-propenyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-26-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

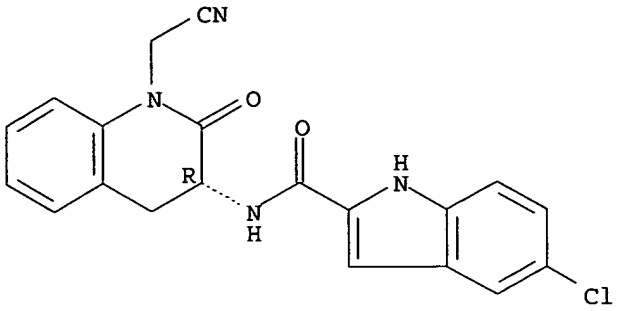
Absolute stereochemistry.



RN 639478-27-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

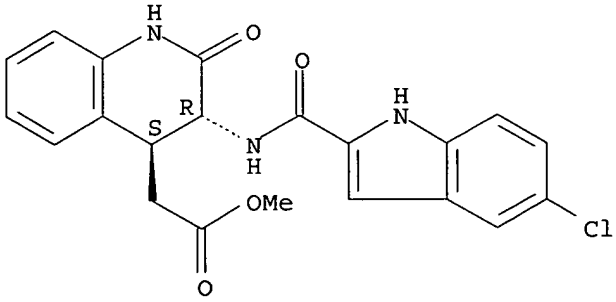
Absolute stereochemistry.

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



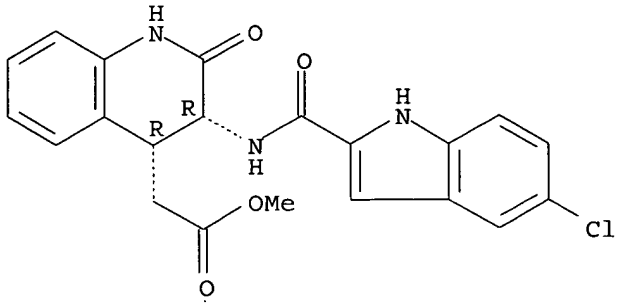
RN 639478-46-9 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester, (3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

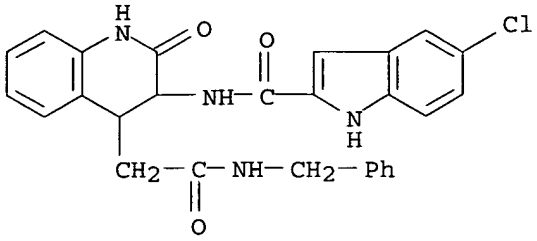


RN 639478-47-0 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester, (3R,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

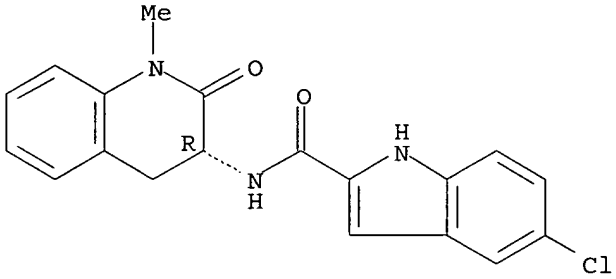


RN 639478-50-5 CAPLUS
CN 4-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



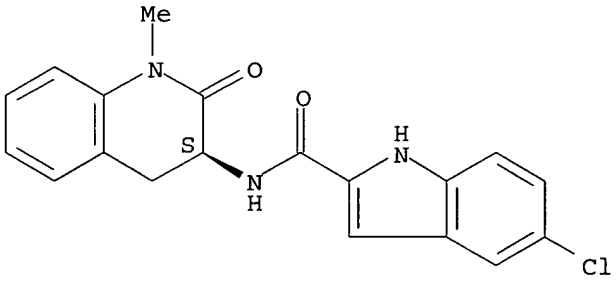
RN 652142-54-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



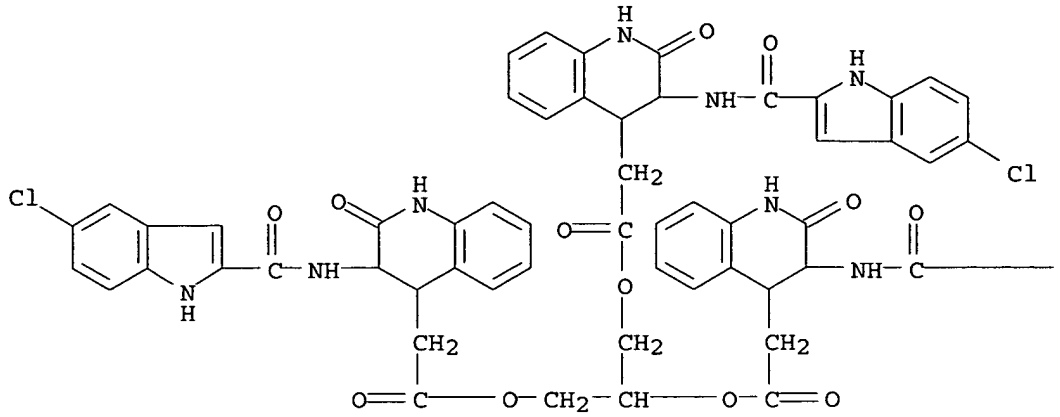
RN 652142-55-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

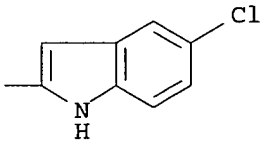


RN 724783-27-1 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, 1,2,3-propanetriyl ester, (3R,3'R,3''R,4S,4'S,4''S)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

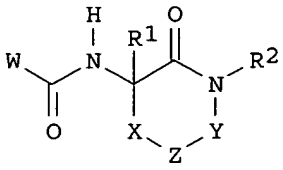


L12 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:3661 CAPLUS
DOCUMENT NUMBER: 140:73181
TITLE: Lactam glycogen phosphorylase inhibitors and their use in disease treatment
INVENTOR(S): Sher, Philip; Wu, Gang; Stouch, Terry; Ellsworth, Bruce
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 51 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004002495	A1	20040101	US 2003-440851		20030519
PRIORITY APPLN. INFO.:			US 2002-382002P	P	20020520

OTHER SOURCE(S): MARPAT 140:73181
GI

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



I

AB Lactams I (W = bicyclic heteroaryl; X = O, S, SO2, CHR3, CHR3O, CHR3S, CHR3SO2, CHR3CO, CH2CHR3; Y = bond, CHR3; Z = aryl, heteroaryl; R1 = H, alkyl, aryl, alkenyl; R2 = H, alkyl, aryl, arylalkyl, heteroarylalkyl, alkenyl; R3 = H, alkyl, aryl, alkenyl, CN, tetrazole derivative, CO2R4, CONR4R4, CONR4OR4; R4 = H, alkyl, aryl, arylalkyl, heteroarylalkyl, etc.) which are glycogen phosphorylase inhibitors are disclosed. Further provided is a method for treating diabetes and related diseases employing a glycogen phosphorylase inhibiting amount of the above compound, either alone or in combination with another therapeutic agent. Thus, the syntheses of 3-(5-chloroindole-2-carbonylamino)-5-methoxy-3,4-dihydrocarbostyril and 3-(5-chloroindole-2-carbonylamino)-2,3,4,5-tetrahydro-1H-1-benzazepin-2-one, and numerous other related compds., are described.

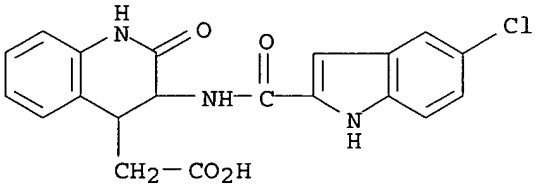
IT **639478-94-7P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(lactam glycogen phosphorylase inhibitors and their use in disease treatment)

RN 639478-94-7 CAPLUS

CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo- (9CI) (CA INDEX NAME)



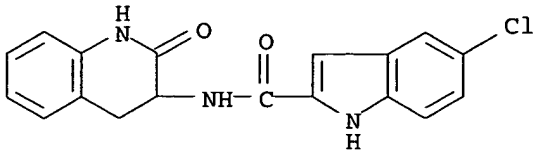
IT **599192-33-3P 639478-12-9P 639478-14-1P**
639478-15-2P 639478-16-3P 639478-17-4P
639478-18-5P 639478-19-6P 639478-20-9P
639478-21-0P 639478-22-1P 639478-23-2P
639478-24-3P 639478-25-4P 639478-26-5P
639478-27-6P 639478-46-9P 639478-47-0P
639478-48-1P 639478-49-2P 639478-50-5P
639478-95-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

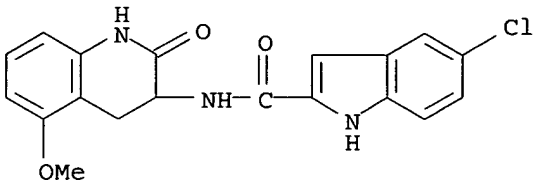
(lactam glycogen phosphorylase inhibitors and their use in disease treatment)

RN 599192-33-3 CAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)

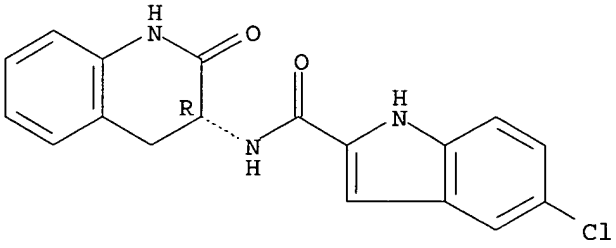


RN 639478-12-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-5-methoxy-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



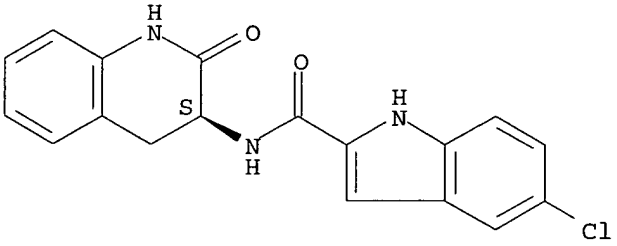
RN 639478-14-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-15-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

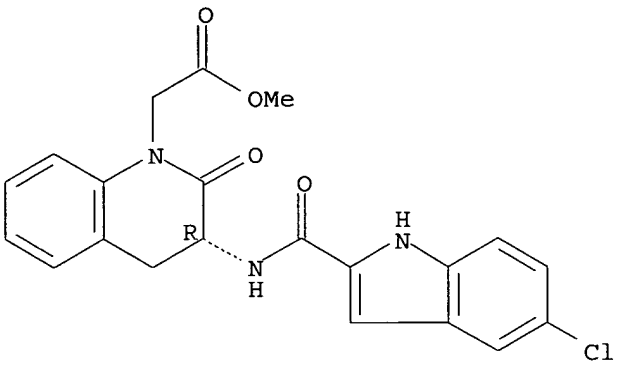
Absolute stereochemistry.



RN 639478-16-3 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester, (3R)- (9CI) (CA INDEX NAME)

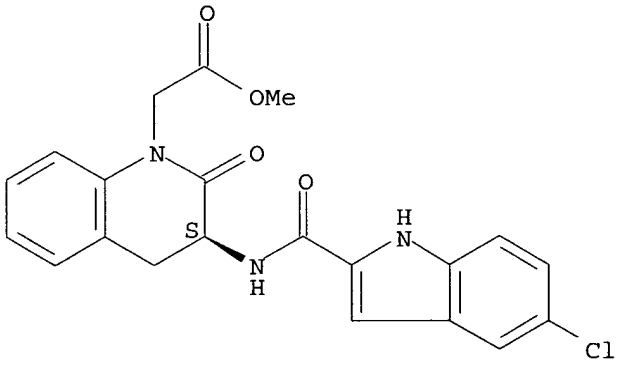
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

Absolute stereochemistry.



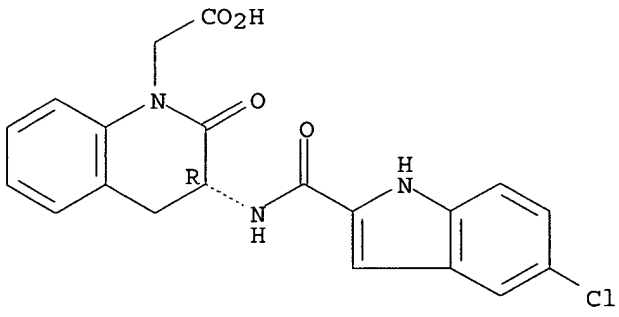
RN 639478-17-4 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-18-5 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3R)- (9CI) (CA INDEX NAME)

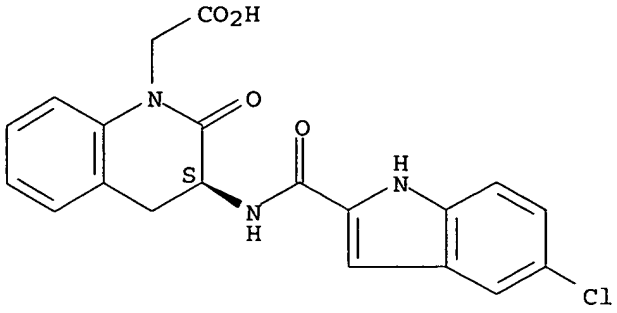
Absolute stereochemistry.



RN 639478-19-6 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-

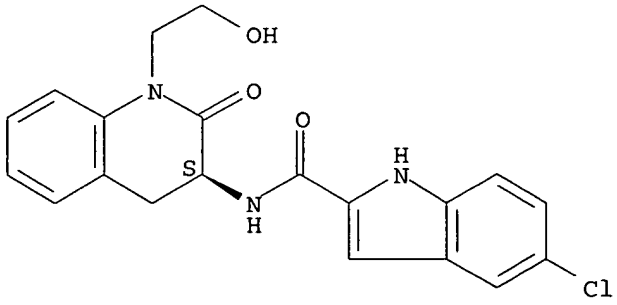
3,4-dihydro-2-oxo-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



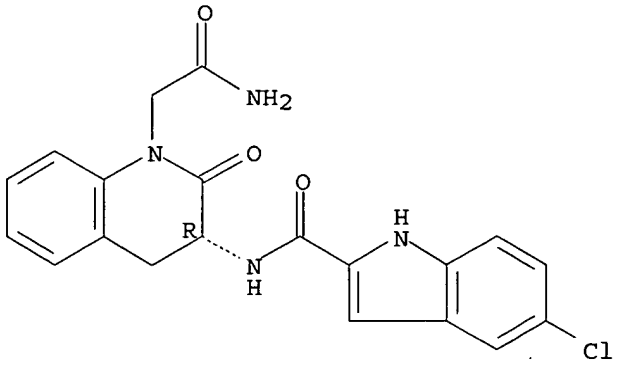
RN 639478-20-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-(2-hydroxyethyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 639478-21-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3R)- (9CI) (CA INDEX NAME)

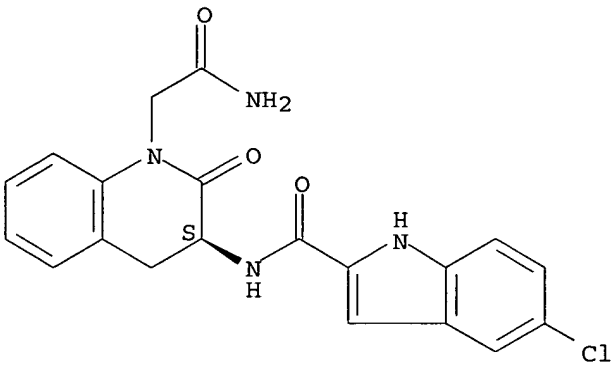
Absolute stereochemistry.



RN 639478-22-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, (3S)- (9CI) (CA INDEX NAME)

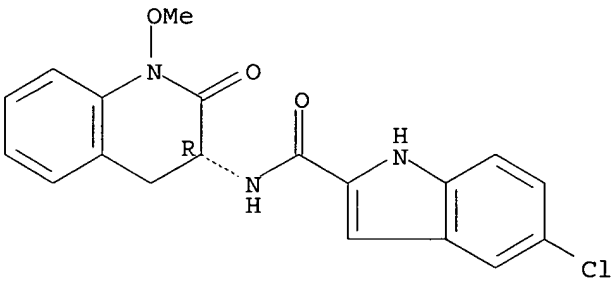
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

Absolute stereochemistry.



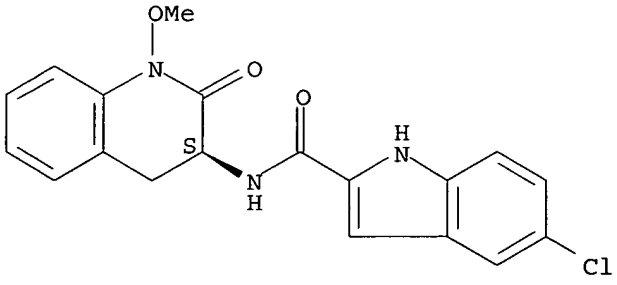
RN 639478-23-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-1-methoxy-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



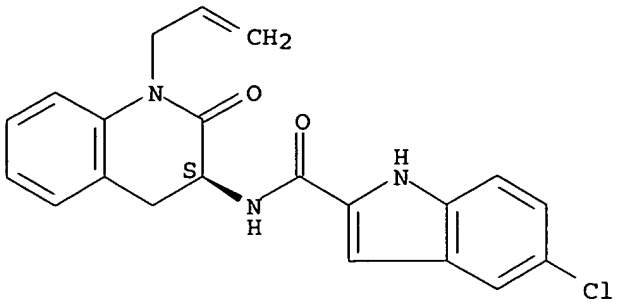
RN 639478-24-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-methoxy-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



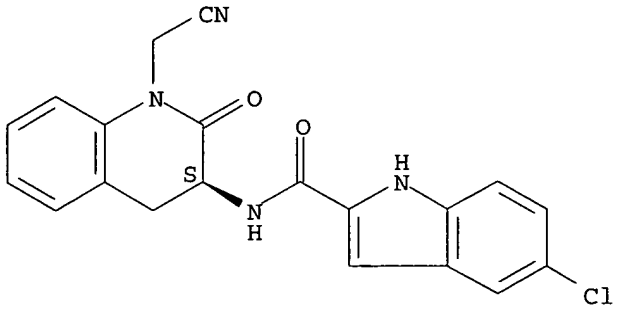
RN 639478-25-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-1-(2-propenyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



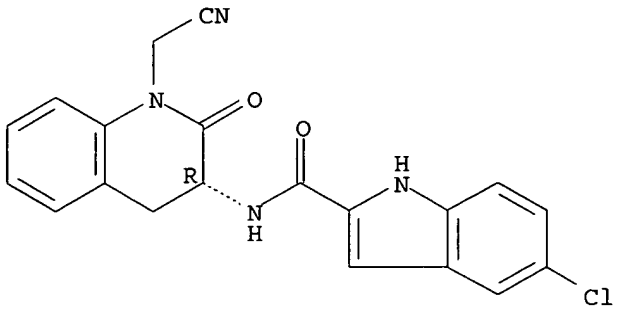
RN 639478-26-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



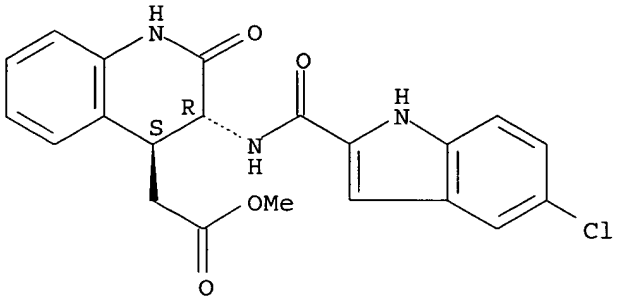
RN 639478-27-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



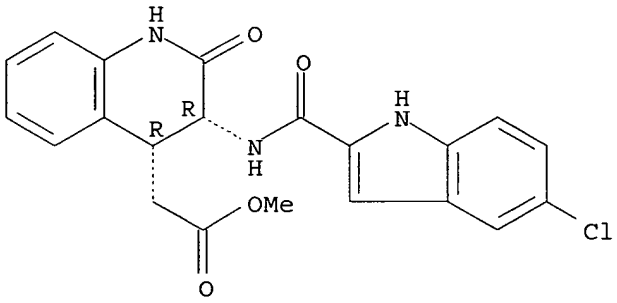
RN 639478-46-9 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester, (3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



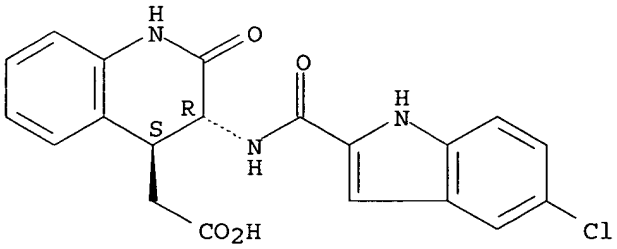
RN 639478-47-0 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, methyl ester, (3R,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



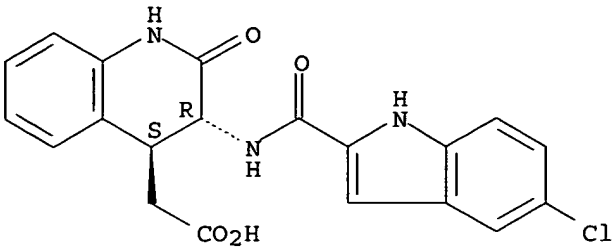
RN 639478-48-1 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

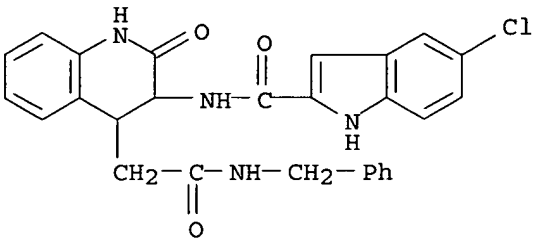


RN 639478-49-2 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

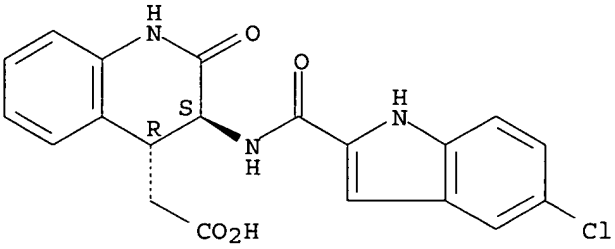


RN 639478-50-5 CAPLUS
CN 4-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 639478-95-8 CAPLUS
CN 4-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-1,2,3,4-tetrahydro-2-oxo-, (3S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:928876 CAPLUS
DOCUMENT NUMBER: 140:145982
TITLE: Novel 3,4-dihydroquinolin-2(1H)-one inhibitors of human glycogen phosphorylase a
AUTHOR(S): Rosauer, Keith G.; Ogawa, Anthony K.; Willoughby, Chris A.; Ellsworth, Kenneth P.; Geissler, Wayne M.; Myers, Robert W.; Deng, Qiaolin; Chapman, Kevin T.; Harris, Georgianna; Moller, David E.
CORPORATE SOURCE: Department of Basic Chemistry, Merck Research Laboratories, Rahway, NJ, 07065, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(24), 4385-4388
CODEN: BMCLE8; ISSN: 0960-894X

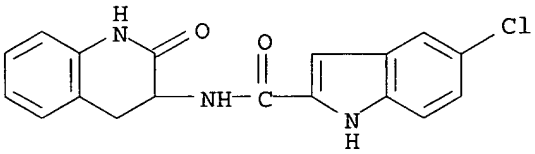
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:145982

AB The preparation of a series of substituted indoles coupled to six- and seven-membered cyclic lactams is described and their role as human glycogen phosphorylase a inhibitors discussed. The SAR of the indole moiety and lactam ring are presented.

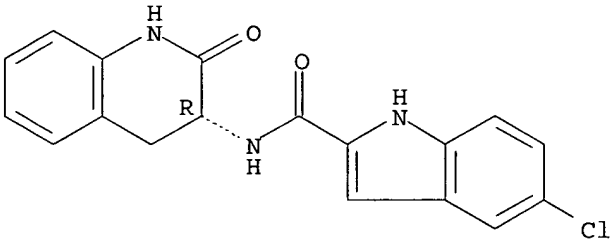
IT **599192-33-3P 639478-14-1P 639478-15-2P**
652142-53-5P 652142-54-6P 652142-55-7P
652142-59-1P 652142-60-4P 652142-73-9P
652142-74-0P 652142-75-1P 652142-77-3P
652142-78-4P 652142-79-5P 652142-80-8P
652142-81-9P 652142-82-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of indolecarbonylaminoquinolinones and related compds. as inhibitors of human glycogen phosphorylase a)

RN 599192-33-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



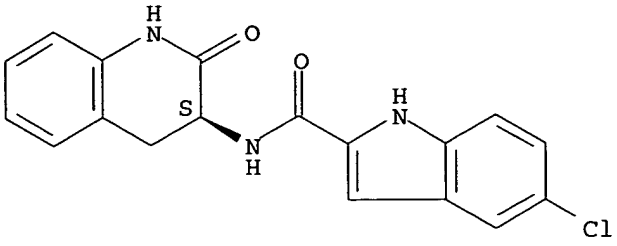
RN 639478-14-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

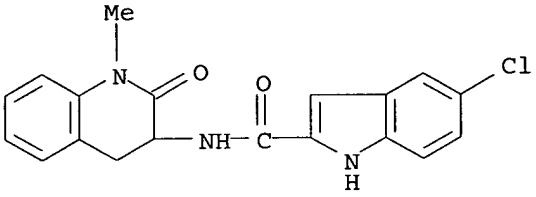


RN 639478-15-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

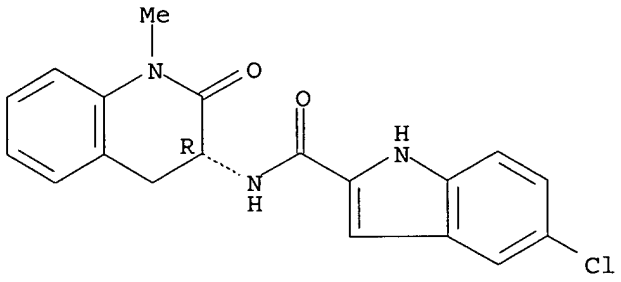


RN 652142-53-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



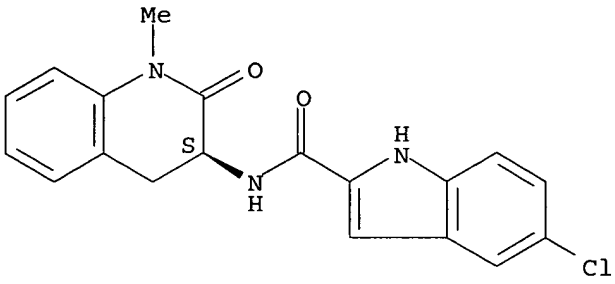
RN 652142-54-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

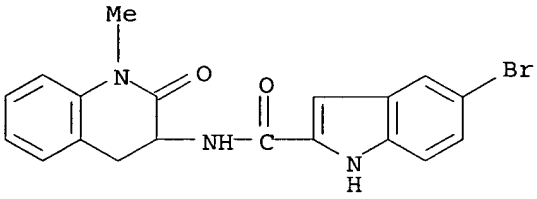


RN 652142-55-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

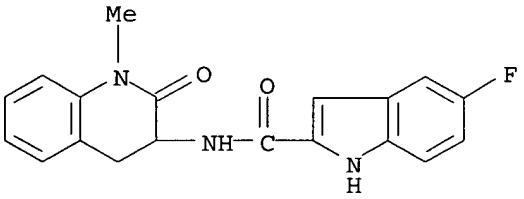
Absolute stereochemistry.



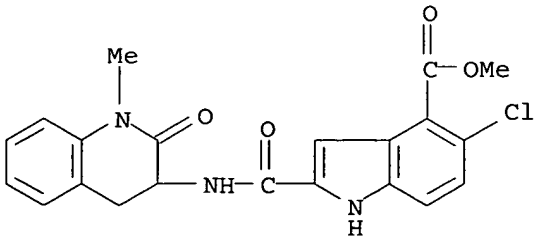
RN 652142-59-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-bromo-N-(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



RN 652142-60-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-fluoro-N-(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)

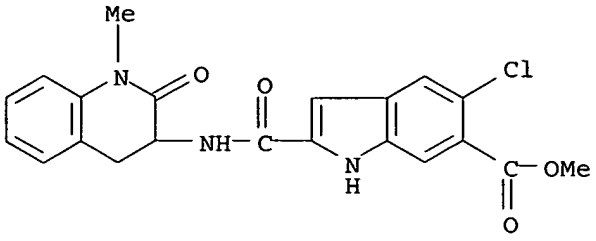


RN 652142-73-9 CAPLUS
CN 1H-Indole-4-carboxylic acid, 5-chloro-2-[[(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

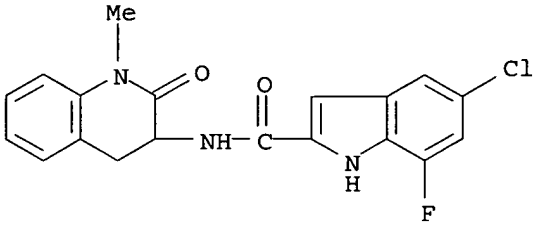


RN 652142-74-0 CAPLUS
CN 1H-Indole-6-carboxylic acid, 5-chloro-2-[[(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

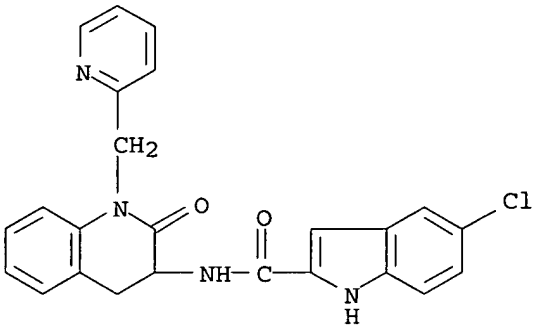
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



RN 652142-75-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-7-fluoro-N-(1,2,3,4-tetrahydro-1-methyl-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)

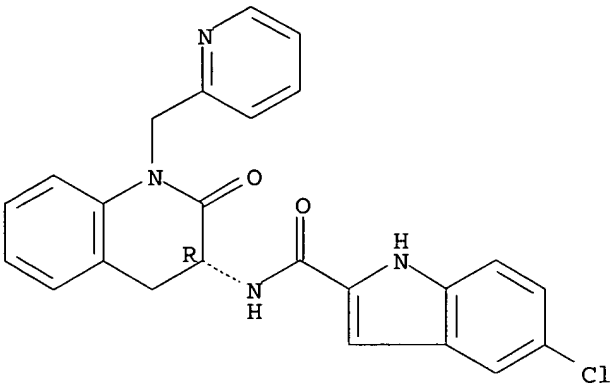


RN 652142-77-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-2-oxo-1-(2-pyridinylmethyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)



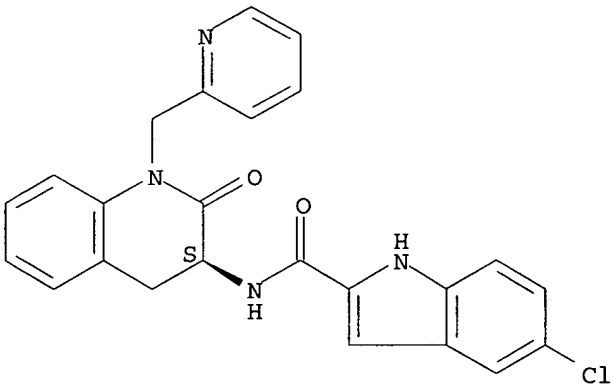
RN 652142-78-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3R)-1,2,3,4-tetrahydro-2-oxo-1-(2-pyridinylmethyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

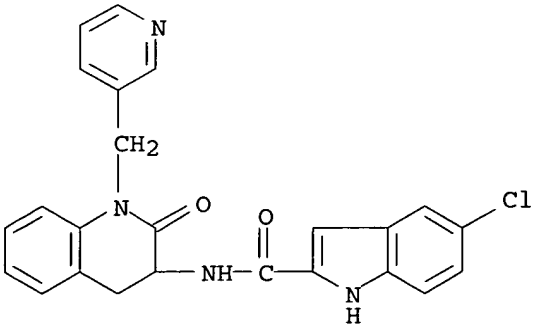


RN 652142-79-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[(3S)-1,2,3,4-tetrahydro-2-oxo-1-(2-pyridinylmethyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

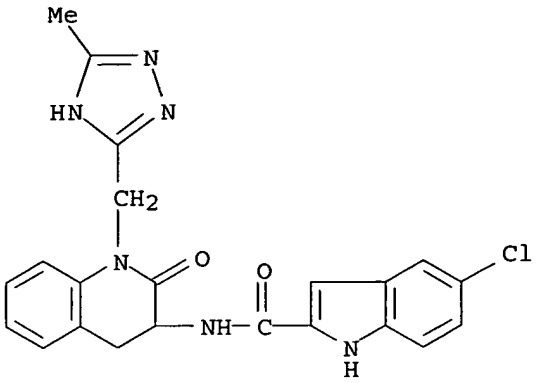


RN 652142-80-8 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-2-oxo-1-(3-pyridinylmethyl)-3-quinolinyl]- (9CI) (CA INDEX NAME)

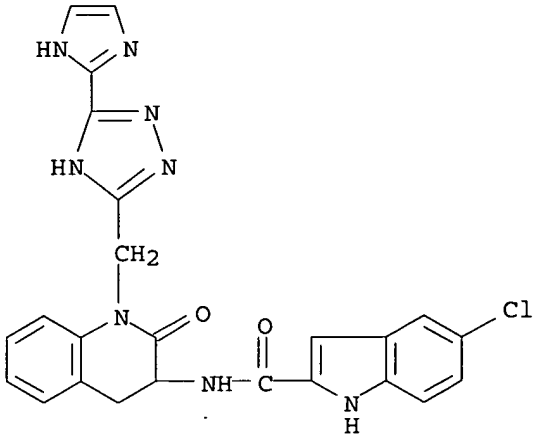


RN 652142-81-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[(5-methyl-1H-

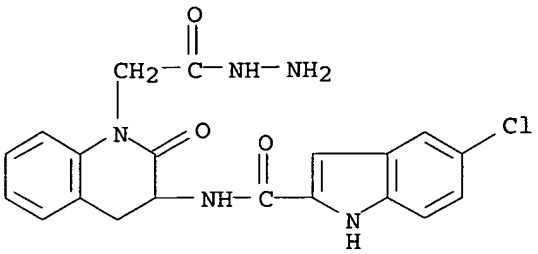
1,2,4-triazol-3-yl)methyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 652142-82-0 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[[5-(1H-imidazol-2-yl)-1H-1,2,4-triazol-3-yl]methyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



IT **652142-76-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of indolecarbonylaminoquinolinones and related compds. as inhibitors of human glycogen phosphorylase a)
RN 652142-76-2 CAPLUS
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, hydrazide (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:719471 CAPLUS
DOCUMENT NUMBER: 139:261174
TITLE: Preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors
INVENTOR(S): Birch, Alan Martin; Morley, Andrew David
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003074513	A2	20030912	WO 2003-GB893		20030304
WO 2003074513	A3	20031231			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
EP 1485371	A2	20041215	EP 2003-712313		20030304
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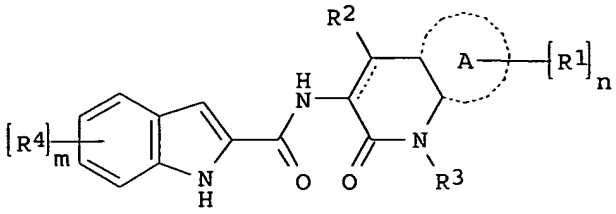
US 2005131016	A1	20050616	US 2003-506748		20030304
JP 2005525364	T2	20050825	JP 2003-572981		20030304
PRIORITY APPLN. INFO.:			GB 2002-5162	A	20020306
			WO 2003-GB893	W	20030304

OTHER SOURCE(S): MARPAT 139:261174
GI



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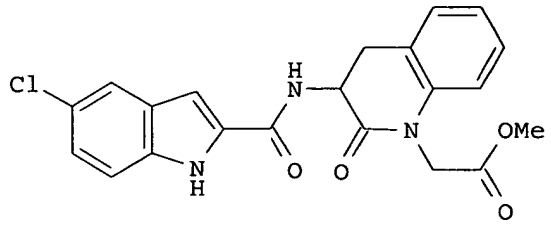


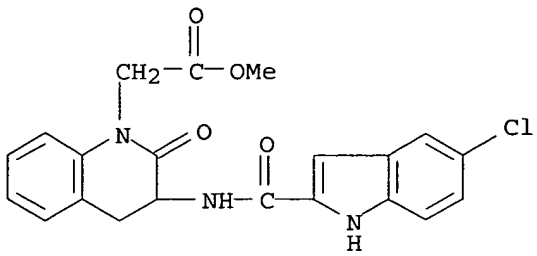
II

AB The title compds. [I; A = phenylene or heteroarylene; m = 0-2; n = 0-2; R1 = halo, NO2, CN, OH, CO2H, etc.; R2 = H, OH, CO2H; R3 = H, OH, aryl, heterocyclyl, etc.; R4 = H, halo, NO2, CN, etc.] which possess glycogen phosphorylase inhibitory activity and accordingly have value in the treatment of disease states associated with increased glycogen phosphorylase activity such as diabetes type II, were prepared Thus, amidation of 5-chloro-1H-indole-2-carboxylic acid with Me 2-(3-amino-2-oxo-3,4-dihydroquinolin-1-(2H)-yl)acetate (preparation given) in the presence of HOBT, DCM and EDCI afforded 59% II. The compds. I showed IC50 values in the range 100μM to 1nM against against hrl glycogen phosphorylase a. Pharmaceutical composition comprising the compound I was claimed.

IT **599192-30-0P 599192-32-2P 599192-36-6P**
599192-81-1P 599192-83-3P 599192-88-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors)

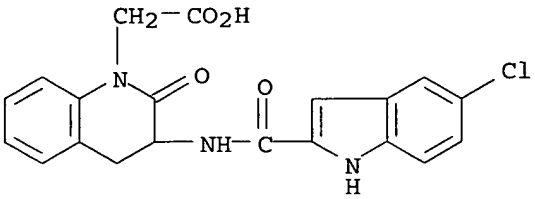
RN 599192-30-0 CAPLUS

CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

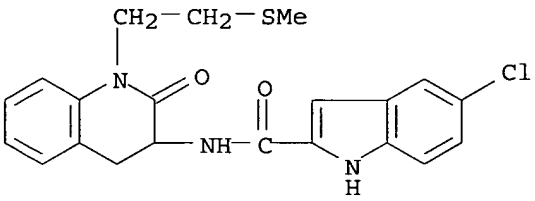


RN 599192-32-2 CAPLUS

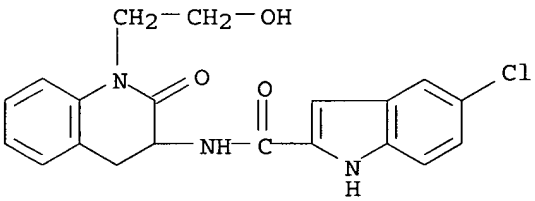
CN 1(2H)-Quinolineacetic acid, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



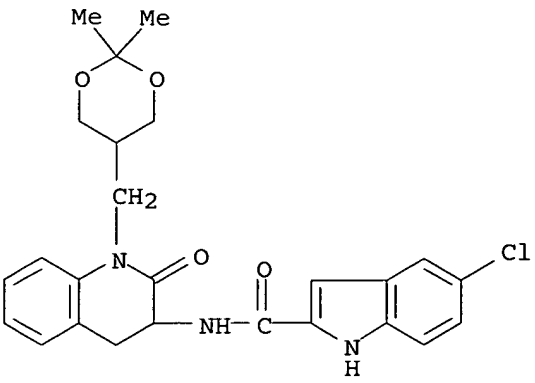
RN 599192-36-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[2-(methylthio)ethyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599192-81-1 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-(2-hydroxyethyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



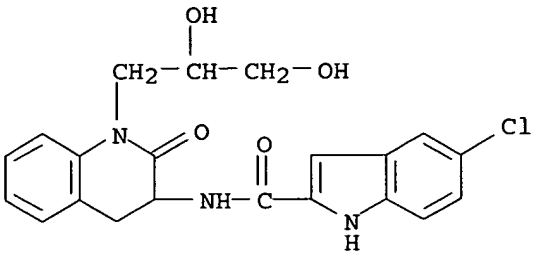
RN 599192-83-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[(2,2-dimethyl-1,3-dioxan-5-yl)methyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599192-88-8 CAPLUS

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-(2,3-dihydroxypropyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



IT **599192-33-3P 599192-34-4P 599192-37-7P**
599192-39-9P 599192-41-3P 599192-43-5P
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599192-50-4P 599192-51-5P 599192-53-7P
599192-55-9P 599192-57-1P 599192-59-3P
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599192-64-0P 599192-65-1P 599192-66-2P
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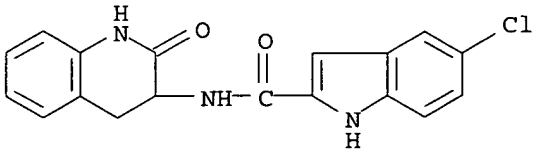
599192-70-8P 599192-71-9P 599192-72-0P
599192-73-1P 599192-74-2P 599192-76-4P
599192-78-6P 599192-80-0P 599192-85-5P
599192-91-3P 599192-93-5P 599192-95-7P
599192-97-9P 599192-98-0P 599193-00-7P
599193-05-2P 599193-09-6P 600653-69-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors)

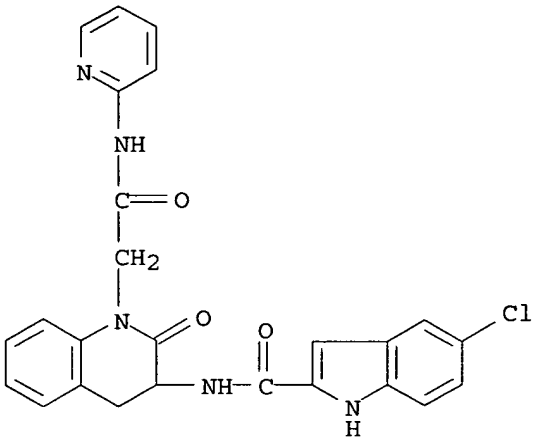
RN 599192-33-3 CAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)

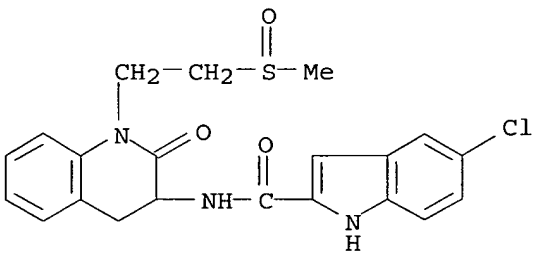


RN 599192-34-4 CAPLUS

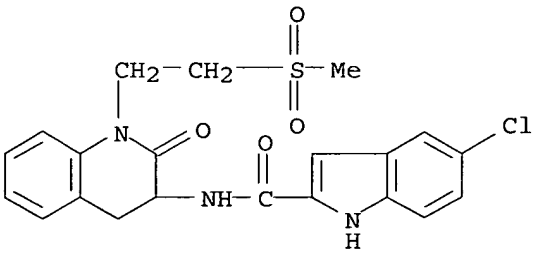
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-2-pyridinyl- (9CI) (CA INDEX NAME)



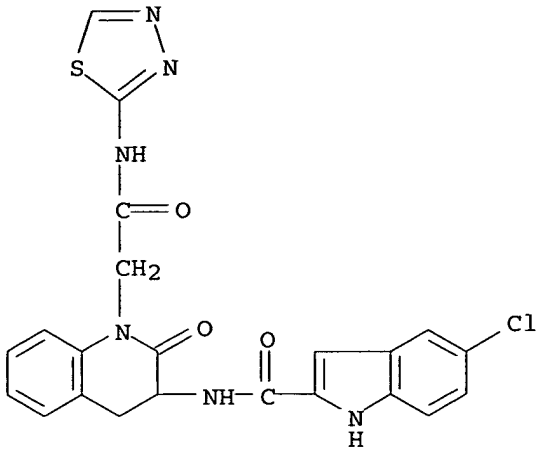
RN 599192-37-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[2-(methylsulfinyl)ethyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



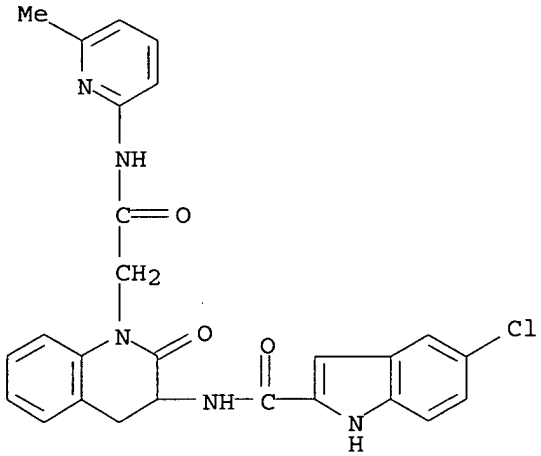
RN 599192-39-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[2-(methylsulfonyl)ethyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



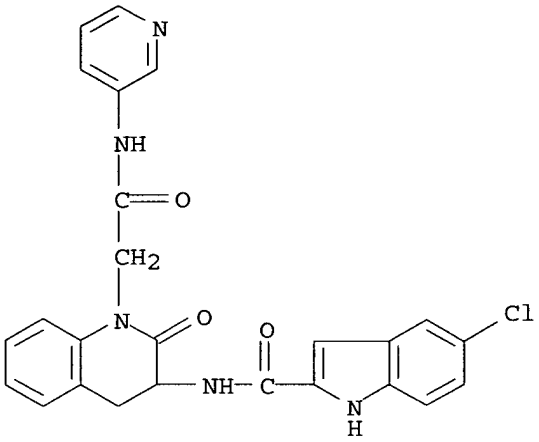
RN 599192-41-3 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-1,3,4-thiadiazol-2-yl- (9CI) (CA INDEX NAME)



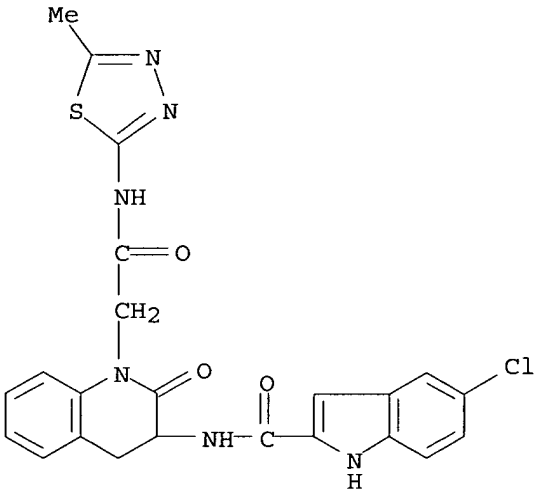
RN 599192-43-5 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(6-methyl-2-pyridinyl)-2-oxo- (9CI) (CA INDEX NAME)



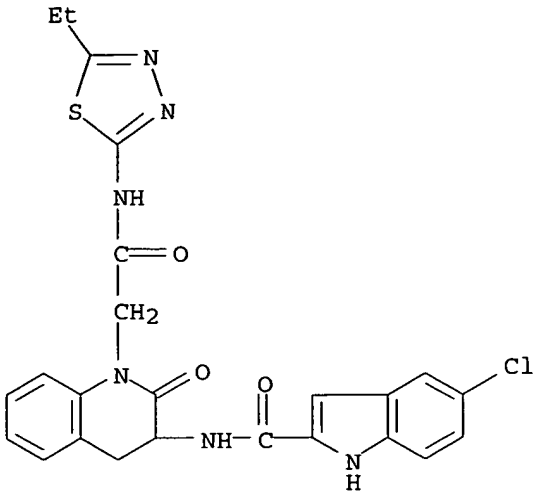
RN 599192-44-6 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-3-pyridinyl- (9CI) (CA INDEX NAME)



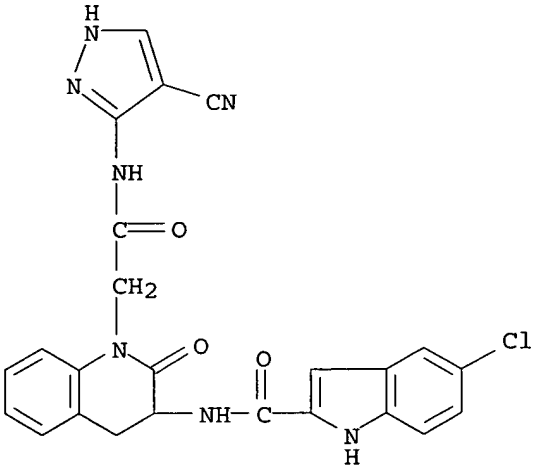
RN 599192-46-8 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(5-methyl-1,3,4-thiadiazol-2-yl)-2-oxo- (9CI) (CA INDEX NAME)



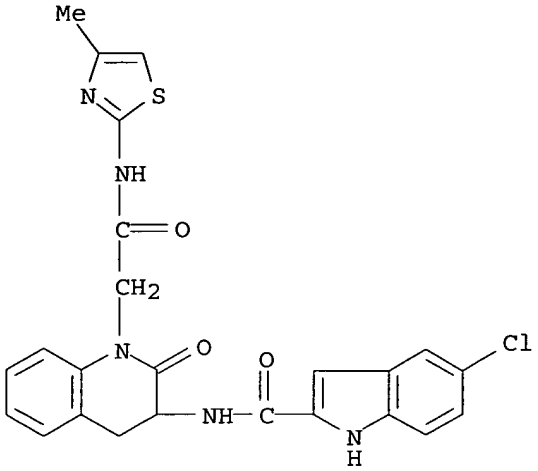
RN 599192-48-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(5-ethyl-1,3,4-thiadiazol-2-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



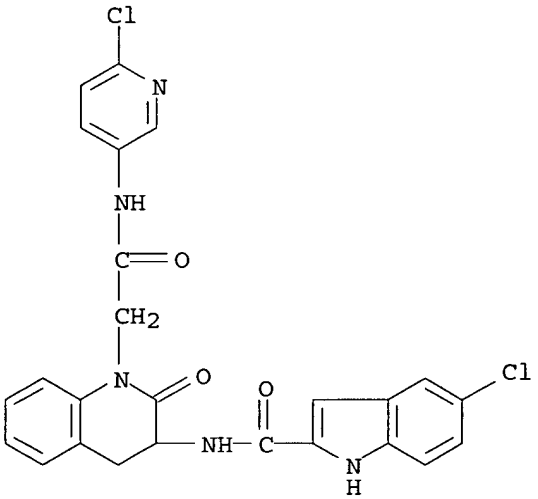
RN 599192-50-4 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(4-cyano-1H-pyrazol-3-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



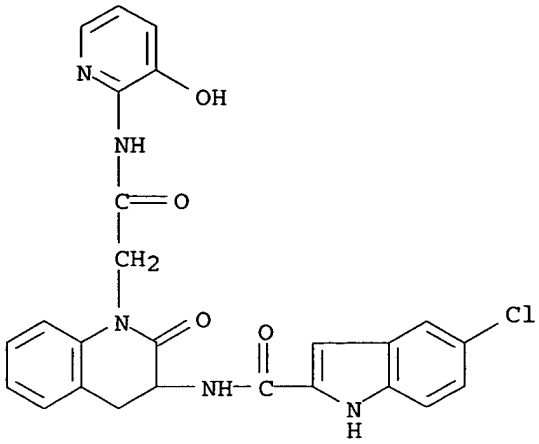
RN 599192-51-5 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(4-methyl-2-thiazolyl)-2-oxo- (9CI) (CA INDEX NAME)



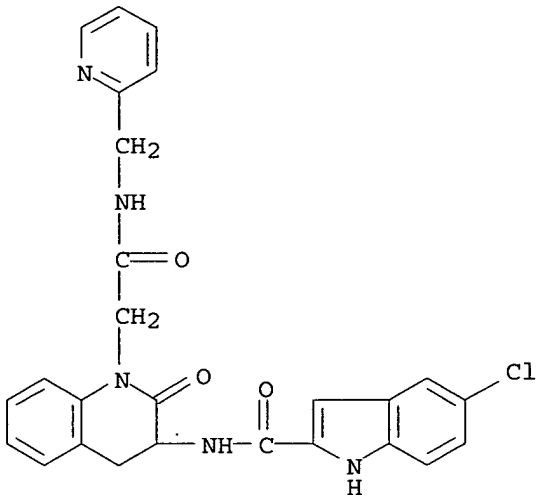
RN 599192-53-7 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(6-chloro-3-pyridinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



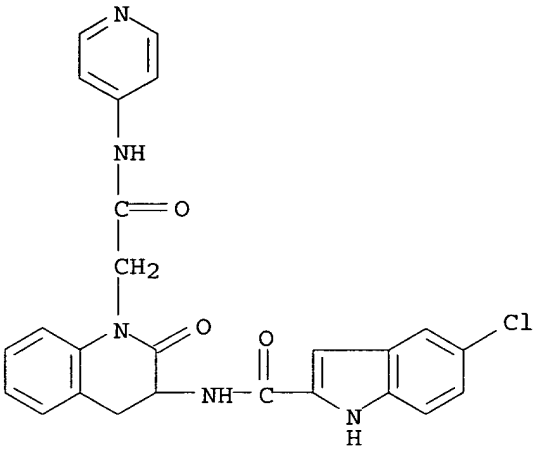
RN 599192-55-9 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(3-hydroxy-2-pyridinyl)-2-oxo- (9CI) (CA INDEX NAME)



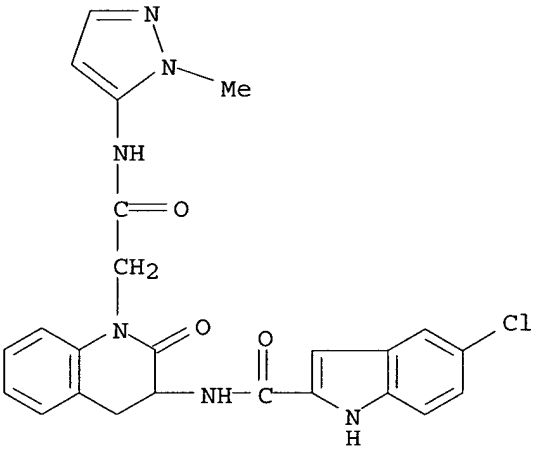
RN 599192-57-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-(2-pyridinylmethyl)- (9CI) (CA INDEX NAME)



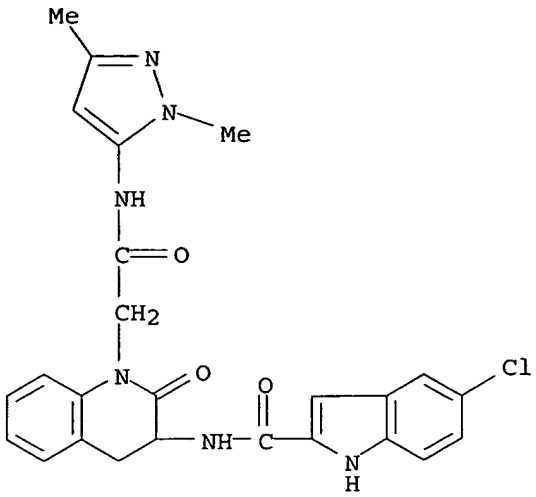
RN 599192-59-3 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-4-pyridinyl- (9CI) (CA INDEX NAME)



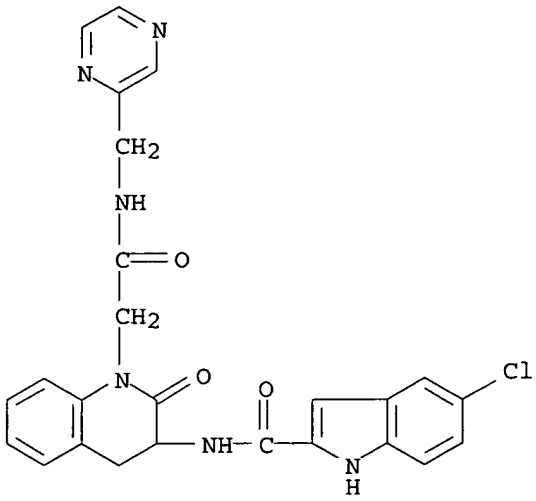
RN 599192-61-7 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(1-methyl-1H-pyrazol-5-yl)-2-oxo- (9CI) (CA INDEX NAME)



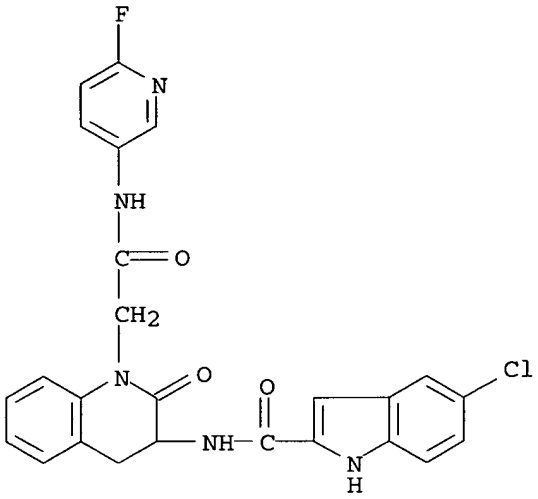
RN 599192-62-8 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(1,3-dimethyl-1H-pyrazol-5-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



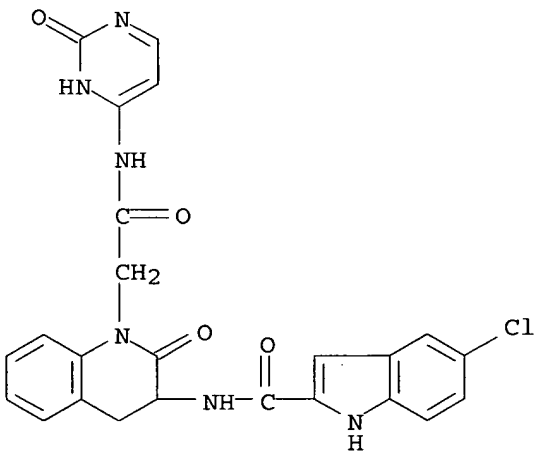
RN 599192-63-9 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-(pyrazinylmethyl)- (9CI) (CA INDEX NAME)



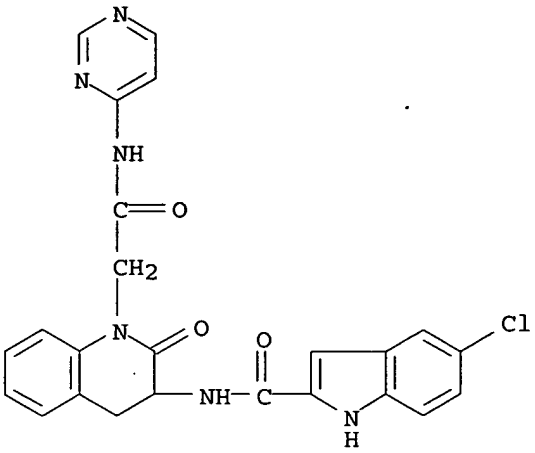
RN 599192-64-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(6-fluoro-3-pyridinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



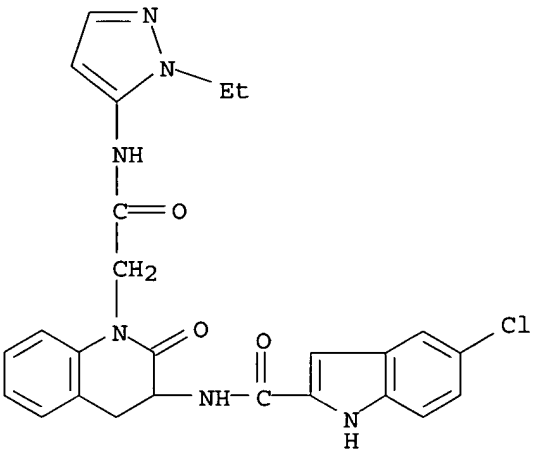
RN 599192-65-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(1,2-dihydro-2-oxo-4-pyrimidinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



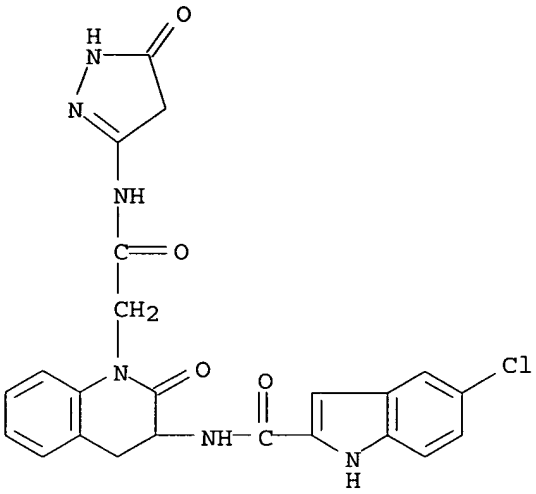
RN 599192-66-2 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-4-pyrimidinyl- (9CI) (CA INDEX NAME)



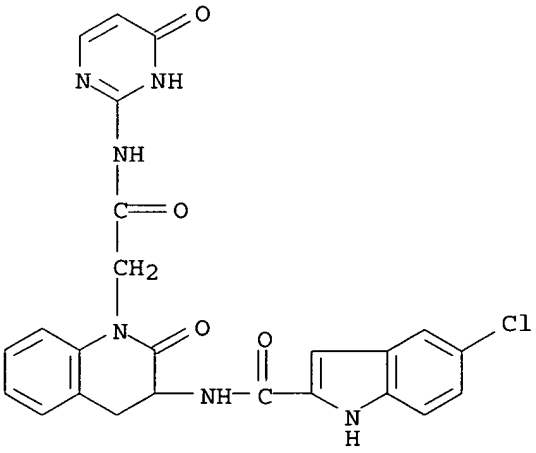
RN 599192-67-3 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(1-ethyl-1H-pyrazol-5-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



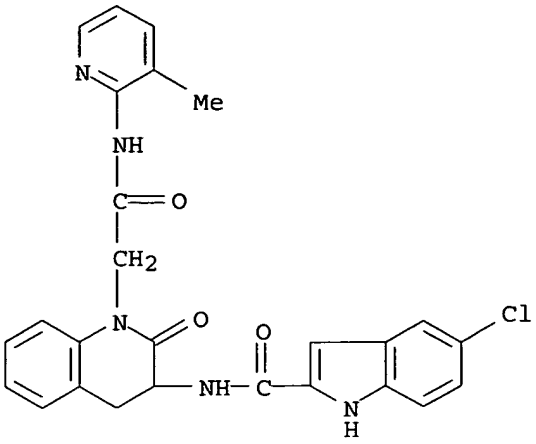
RN 599192-68-4 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(4,5-dihydro-5-oxo-1H-pyrazol-3-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



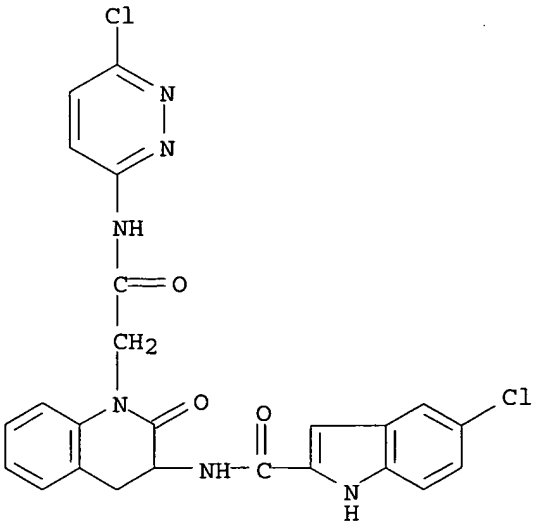
RN 599192-69-5 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(1,4-dihydro-4-oxo-2-pyrimidinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



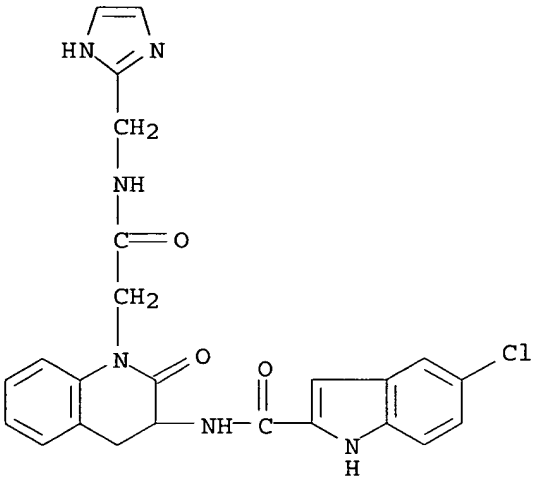
RN 599192-70-8 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(3-methyl-2-pyridinyl)-2-oxo- (9CI) (CA INDEX NAME)



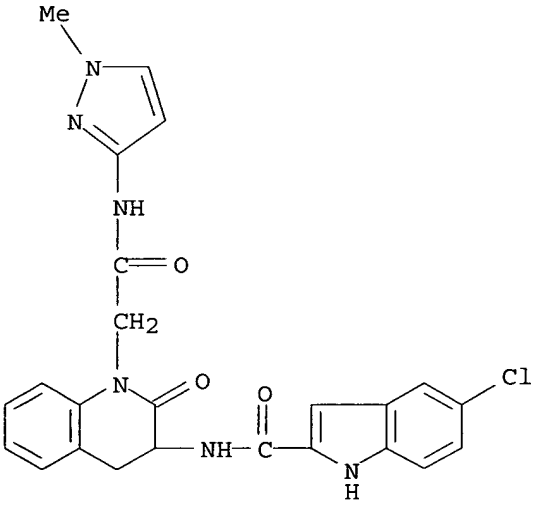
RN 599192-71-9 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(6-chloro-3-pyridazinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



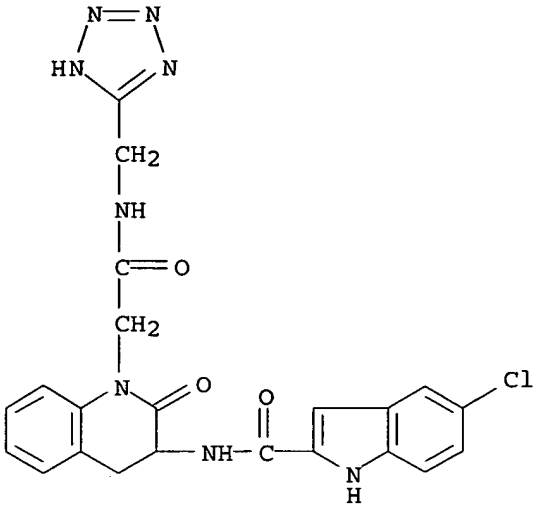
RN 599192-72-0 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(1H-imidazol-2-ylmethyl)-2-oxo- (9CI) (CA INDEX NAME)



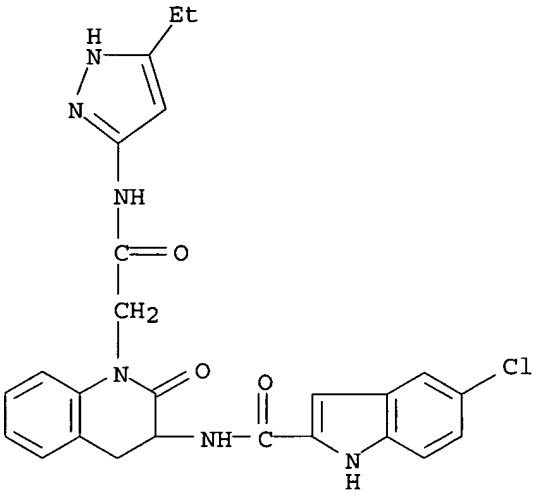
RN 599192-73-1 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-N-(1-methyl-1H-pyrazol-3-yl)-2-oxo- (9CI) (CA INDEX NAME)



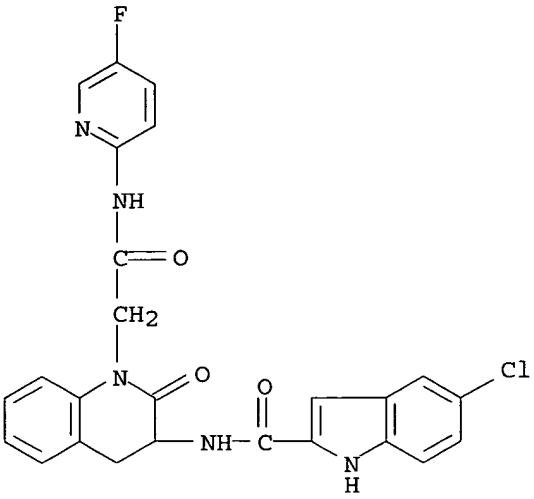
RN 599192-74-2 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-N-(1H-tetrazol-5-ylmethyl)- (9CI) (CA INDEX NAME)



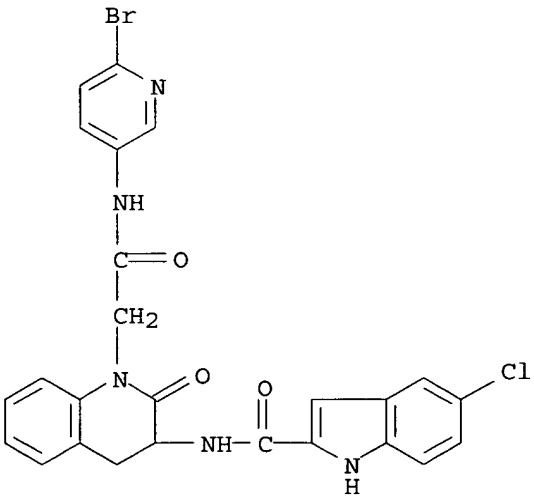
RN 599192-76-4 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(5-ethyl-1H-pyrazol-3-yl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



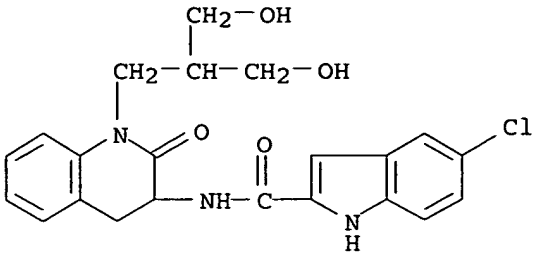
RN 599192-78-6 CAPLUS
CN 1(2H)-Quinolineacetamide, 3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-N-(5-fluoro-2-pyridinyl)-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



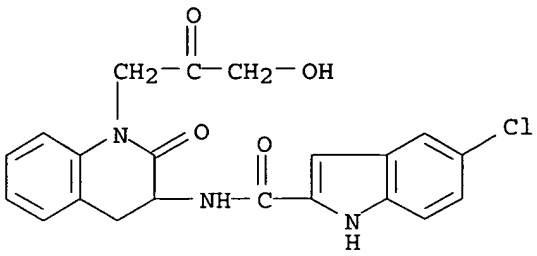
RN 599192-80-0 CAPLUS
CN 1(2H)-Quinolineacetamide, N-(6-bromo-3-pyridinyl)-3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo- (9CI) (CA INDEX NAME)



RN 599192-85-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[3-hydroxy-2-(hydroxymethyl)propyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

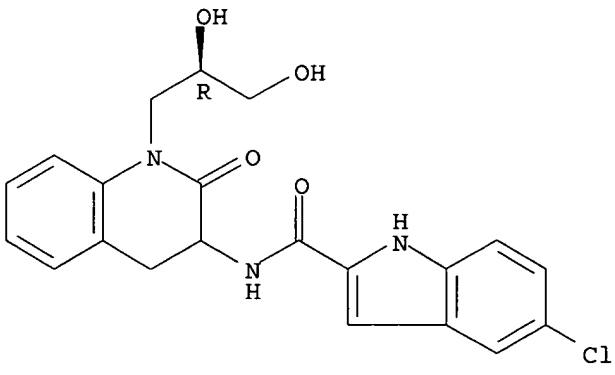


RN 599192-91-3 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-(3-hydroxy-2-oxopropyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

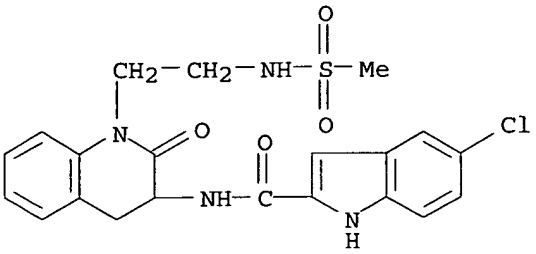


RN 599192-93-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[(2R)-2,3-dihydroxypropyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

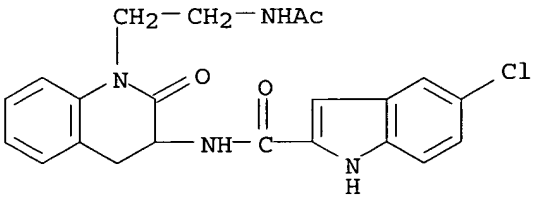
Absolute stereochemistry.



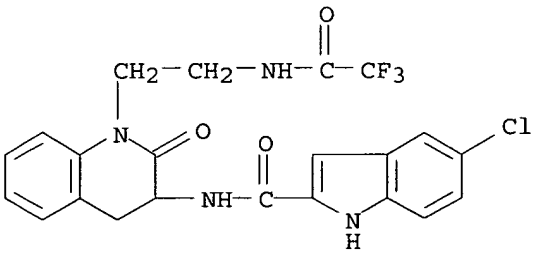
RN 599192-95-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-[2-[(methylsulfonyl)amino]ethyl]-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



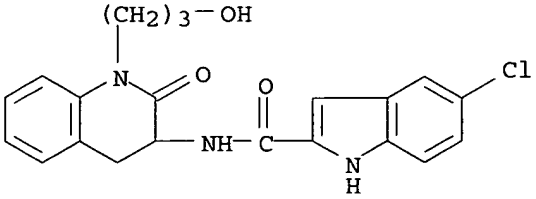
RN 599192-97-9 CAPLUS
CN 1H-Indole-2-carboxamide, N-[1-[2-(acetylamino)ethyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]-5-chloro- (9CI) (CA INDEX NAME)



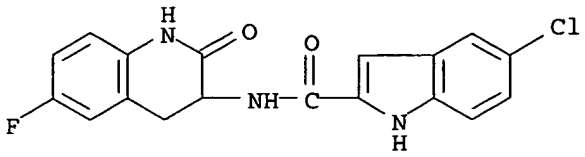
RN 599192-98-0 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-2-oxo-1-[2-[(trifluoroacetyl)amino]ethyl]-3-quinolinyl]- (9CI) (CA INDEX NAME)



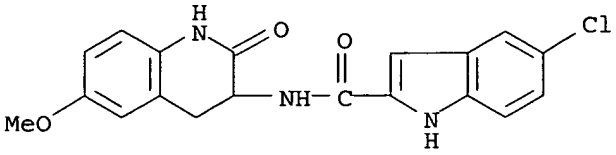
RN 599193-00-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1,2,3,4-tetrahydro-1-(3-hydroxypropyl)-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



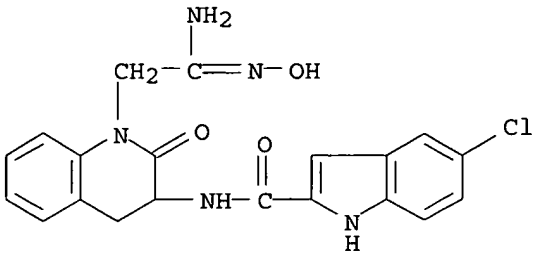
RN 599193-05-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(6-fluoro-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



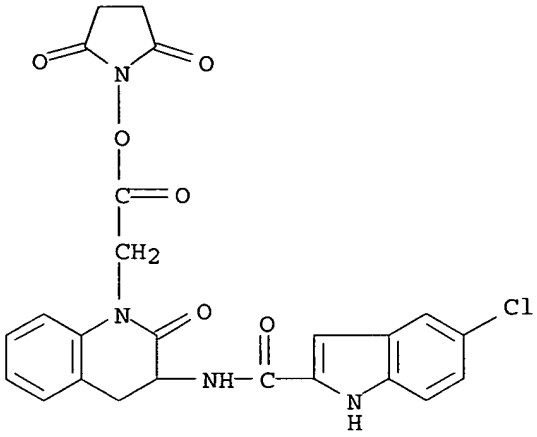
RN 599193-09-6 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(1,2,3,4-tetrahydro-6-methoxy-2-oxo-3-quinolinyl)- (9CI) (CA INDEX NAME)



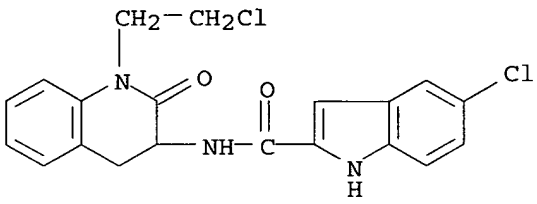
RN 600653-69-8 CAPLUS
CN 1H-Indole-2-carboxamide, N-[1-[(2Z)-2-amino-2-(hydroxyimino)ethyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]-5-chloro- (9CI) (CA INDEX NAME)



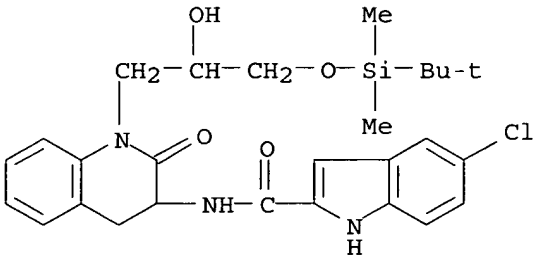
IT **599193-13-2P 599193-15-4P 599193-21-2P**
599193-23-4P 599193-28-9P 599193-30-3P
599193-32-5P 599193-36-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors)
RN 599193-13-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599193-15-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-(2-chloroethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

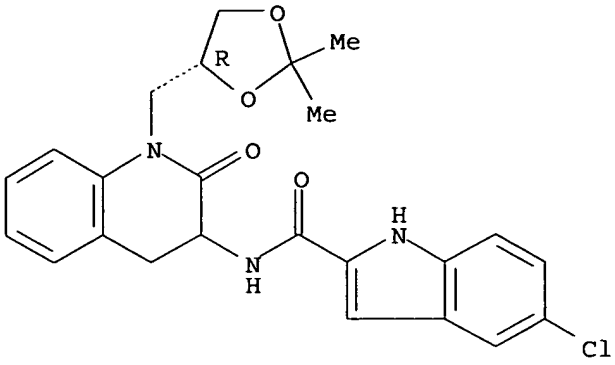


RN 599193-21-2 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxypropyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599193-23-4 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 599193-28-9 CAPLUS
CN 1H-Indole-2-carboxamide, N-[1-(2-aminoethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]-5-chloro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

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CRN 599193-27-8
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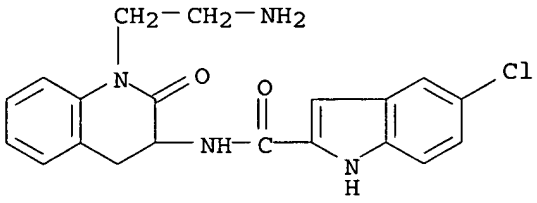
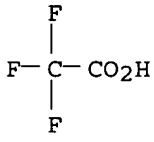
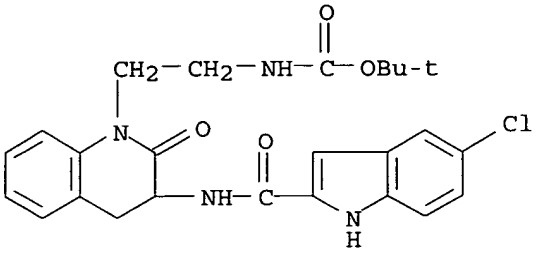


CM 2

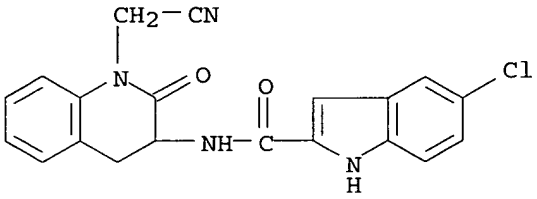
CRN 76-05-1
CMF C2 H F3 O2



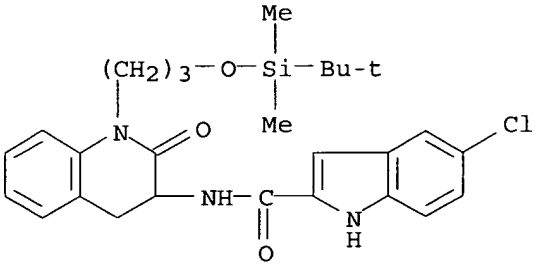
RN 599193-30-3 CAPLUS
CN Carbamic acid, [2-[3-[[(5-chloro-1H-indol-2-yl)carbonyl]amino]-3,4-dihydro-2-oxo-1(2H)-quinolinyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 599193-32-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-(cyanomethyl)-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



RN 599193-36-9 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



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L14	75	FILE BIOSIS
L15	66	FILE EMBASE
L16	79	FILE CAPLUS
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L18	9	FILE MEDLINE
L19	10	FILE BIOSIS
L20	6	FILE EMBASE
L21	24	FILE CAPLUS

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

TOTAL FOR ALL FILES
L22 49 ELLSWORTH B?/AU

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L24 2 FILE BIOSIS
L25 0 FILE EMBASE
L26 7 FILE CAPLUS

TOTAL FOR ALL FILES
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L30 0 FILE EMBASE
L31 5 FILE CAPLUS

TOTAL FOR ALL FILES
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PROCESSING COMPLETED FOR L32
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L33 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:612299 CAPLUS
DOCUMENT NUMBER: 143:133380
TITLE: Preparation of azabicyclic heterocycles as cannabinoid receptor modulators
INVENTOR(S): Gu, Guixue; Ewing, William R.; Mikkilineni, Amarendra B.; Pendri, Annapurna; **Ellsworth, Bruce A.**; **Sher, Philip M.**; Gerritz, Samuel; Sun, Chongqing; Murugesan, Natesan; Wu, Ximao
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063762	A1	20050714	WO 2004-US42878	20041217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005171110	A1	20050804	US 2004-16198	20041217

PRIORITY APPLN. INFO.: US 2003-531451P P 20031219
US 2004-16198 A 20041217

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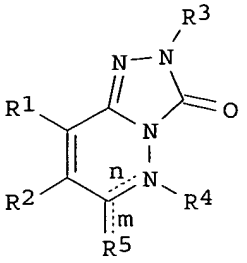

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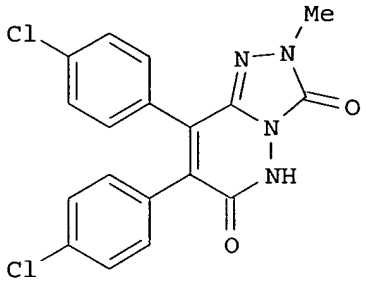

II

AB The present application describes compds. I [R1, R2 = halo, CN, alkyl, etc.; R3 = H alkyl, alkenyl, cycloalkyl, etc.; R4 is absent when n is a double bond; R4 = H, alkyl, cycloalkyl, etc.; R5 = halo, (un)substituted OH, NH2, etc. when m is a single bond; R5 = O when m = a double bond; m, n = a single or double bond; when m is a single bond, n is a double bond; when m is a double bond, n is a single bond], pharmaceutical compns. comprising at least one compound I and optionally one or more addnl. therapeutic agents and methods of treatment using the compds. I both alone and in combination with one or more addnl. therapeutic agents. Over 40 compds. I were prepared E.g., a multi-step synthesis of II, starting from dichloromandelic anhydride, was given. The exemplified compds. I showed the CB-1 receptor binding Ki values in the range of 0.01 nM to 10000 nM.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:572592 CAPLUS
DOCUMENT NUMBER: 143:97378
TITLE: Preparation of azabicyclic heterocycles as cannabinoid receptor modulators
INVENTOR(S): Yu, Guixue; Ewing, William R.; Mikkilineni, Amarendra B.; Pendri, Annapurna; **Sher, Philip M.**; Gerritz, Samuel; **Ellsworth, Bruce A.**; Wu, Gang; Huang, Yanting; Sun, Chongqing; Murugesan, Natesan; Gu, Zhengxiang; Wang, Ying; Sitkoff, Doree; Johnson, Stephen R.; Wu, Ximao
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 196 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005143381	A1	20050630	US 2004-16135	20041217
WO 2005063761	A1	20050714	WO 2004-US42820	20041217

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GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

WO 2005061509 A1 20050707 WO 2004-US42542 20041220
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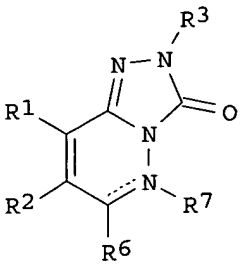
MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-531451P P 20031219
US 2004-16135 A 20041217

GI



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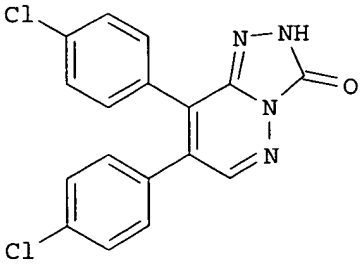

II

AB The present application describes compds. I [R1, R2 = halo, CN, alkyl, etc.; R3 = alkyl, alkenyl, cycloalkyl, etc.; R6 = H, alkyl, cycloalkyl, etc.; R7 is absent when double bond; or R7 = H, alkyl, cycloalkyl, etc.], pharmaceutical compns. comprising at least one compound I and optionally one or more addnl. therapeutic agents and methods of treatment using the compds. I both alone and in combination with one or more addnl. therapeutic agents. Over 400 compds. I were prepared E.g., a multi-step synthesis of II, starting from dibromopyridazinone, was given. Representative compds. I showed the CB-1 receptor binding Ki values in the range of 0.01 nM to 10000 nM.

L33 ANSWER 3 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:129879 BIOSIS
DOCUMENT NUMBER: PREV200300129879
TITLE: C-aryl glucoside SGLT2 inhibitors and method.
AUTHOR(S): **Ellsworth, Bruce** [Inventor, Reprint Author]; Washburn, William N. [Inventor]; **Sher, Philip M.** [Inventor]; Wu, Gang [Inventor]; Meng, Wei [Inventor]
CORPORATE SOURCE: ASSIGNEE: Bristol-Myers Squibb Company
PATENT INFORMATION: US 6515117 20030204
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Feb 4 2003) Vol. 1267, No. 1.

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

http://www.uspto.gov/web/menu/patdata.html. e-file.
ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Mar 2003
Last Updated on STN: 5 Mar 2003

AB An SGLT2 inhibiting compound is provided having the formula ##STR1## A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent.

L33 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:473244 CAPLUS
DOCUMENT NUMBER: 139:36736
TITLE: Preparation of C-aryl glucoside as antidiabetic agents and SGLT2 inhibitors
INVENTOR(S): Washburn, William N.; **Ellsworth, Bruce**; Meng, Wei; Wu, Gang; **Sher, Philip M.**
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 42 pp., Cont. of U.S. Ser. No. 805,341, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003114390	A1	20030619	US 2002-264410	20021004
PRIORITY APPLN. INFO.:			US 2001-805341	B1 20010313

OTHER SOURCE(S): MARPAT 139:36736
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Sodium dependent glucose transporters found in the intestine and kidney (SGLT2) inhibiting C-aryl glucoside compds. I where R1, R2, and R2a are independently hydrogen, OH, OR5, lower alkyl, CF3, OCHF2, OCF3, SR5i or halogen, or two of R1, R2 and R2a together with the carbons to which they are attached can form an annelated five, six or seven membered carbocycle or heterocycle; R3 and R4 are independently hydrogen, OH, OR5a, O-aryl, OCH2Aryl, lower alkyl, cycloalkyl, CF3, -OCHF2, -OCF3, halogen, -CN, -CO2R5b, -CO2H, -COR6b, -CH(OH)R6c, -CH(OR5h)R6d, -CONR6R6a, -NHCOR5c, -NHSO2R5d, -NHSO2Aryl, Aryl, -SR5e, -SOR5f, SO2R5g, SO2Aryl, or a five, six or seven membered heterocycle, or R3 and R4 together with the carbons to which they are attached form an annelated five, six or seven membered carbocycle or heterocycle; R5, R5a, R5b, R5c, R5d, R5e, R5f, R5g, R5h, and R5I are independently lower alkyl; R6, R6a, R6b, R6c and R6d are independently hydrogen, alkyl, aryl, alkylaryl or cycloalkyl, or R6 and R6a together with the nitrogen to which they are attached form an annelated five, six or seven membered heterocycle; A is O, S, NH, or (CH2)n where n is 0-3. A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent. Thus, II was prepared as an antidiabetic agent other than an SGLT2 inhibitor, an agent for treating the complications of

diabetes, an anti-obesity agent, an antihypertensive agent, an antiplatelet agent, an antiatherosclerotic agent, and/or a lipid-lowering agent (no data).

L33 ANSWER 5 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2002:435032 BIOSIS
DOCUMENT NUMBER: PREV200200435032
TITLE: C-aryl glucoside SGLT2 inhibitors and method.
AUTHOR(S): **Ellsworth, Bruce** [Inventor, Reprint author]; Washburn, William N. [Inventor]; **Sher, Philip M.** [Inventor]; Wu, Gang [Inventor]; Meng, Wei [Inventor]
CORPORATE SOURCE: Princeton, NJ, USA
ASSIGNEE: Bristol-Myers Squibb Company
PATENT INFORMATION: US 6414126 20020702
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (July 2, 2002) Vol. 1260, No. 1. http://www.uspto.gov/web/menu/patdata.html. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 14 Aug 2002
Last Updated on STN: 14 Aug 2002

AB SGLT2 inhibiting compounds are provided having the formula ##STR1## where R1, R2, and R2a are independently hydrogen, OH, OR5, lower alkyl, CF3, OCHF2, OCF3, SR5i or halogen, or two of R1, R2 and R2a together with the carbons to which they are attached can form an annelated five, six or seven membered carbocycle or heterocycle; R3 and R4 are independently hydrogen, OH, OR5a, OAryl, OCH2 Aryl, lower alkyl, cycloalkyl, CF3, --OCHF2, --OCF3, halogen, --CN, --CO2 R5b, --CO2 H, --COR6b, --CH(OH)R6c, --CH(OR5h)R6d, --CONR6 R6a, --NHCOR5c, --NHSO2 R5d, --NHSO2 Aryl, Aryl, --SR5e, --SOR5f, --SO2 R5g, --SO2 Aryl, or a five, six or seven membered heterocycle, or R3 and R4 together with the carbons to which they are attached form an annelated five, six or seven membered carbocycle or heterocycle; R5, R5a, R5b, R5c, R5d, R5e, R5f, R5g, R5h and R5i are independently lower alkyl; R6, R6a, R6b, R6c and R6d are independently hydrogen, alkyl,aryl, alkylaryl or cycloalkyl, or R6 and R6a together with the nitrogen to which they are attached form an annelated five, six or seven membered heterocycle; A is O, S, NH, or (CH2)n where n is 0-3. A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent.

L33 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:736927 CAPLUS
DOCUMENT NUMBER: 137:247879
TITLE: Preparation of antidiabetic agents C-aryl glucoside as human SGLT2 inhibitors
INVENTOR(S): **Ellsworth, Bruce**; Washburn, William N.; **Sher, Philip M.**; Wu, Gang; Meng, Wei
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. 6,414,126. CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 2002137903		A1	20020926	US 2002-151436	20020520
US 6515117		B2	20030204		
US 6414126		B1	20020702	US 2000-679027	20001004
ZA 2002002604		A	20030703	ZA 2002-2604	20020403
CA 2486539		AA	20031204	CA 2003-2486539	20030515
WO 2003099836		A1	20031204	WO 2003-US15591	20030515
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PRIORITY APPLN. INFO.:				US 1999-158773P	P 19991012
				US 2000-194615P	P 20000405
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				WO 2003-US15591	W 20030515

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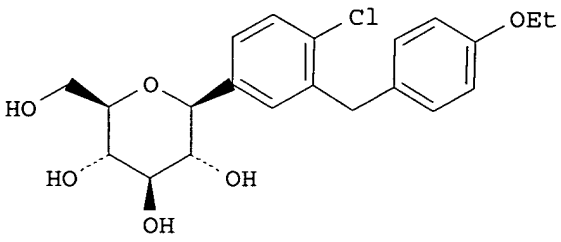

I

AB An SGLT2 inhibiting compound is provided having the formula I method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent (no data). 1A pharmaceutical combination comprising an SGLT2 inhibitor compound and an antidiabetic agent other than an SGLT2 inhibitor, for treating the complications of diabetes, an anti-obesity agent, an antihypertensive agent, an antiplatelet agent, an antiatherosclerotic agent, and/or a lipid-lowering agent (no data). A method for treating or delaying the progression or onset of diabetes, diabetic retinopathy, diabetic neuropathy, diabetic nephropathy, delayed wound healing, insulin resistance, hyperglycemia, hyperinsulinemia, elevated blood levels of fatty acids or glycerol, hyperlipidemia, obesity, hypertriglyceridemia, Syndrome X, diabetic complications, atherosclerosis or hypertension, or for increasing high d. lipoprotein levels, which comprises administering to a mammalian species in need of treatment a therapeutically effective amount of a compd (no data).

L33 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:283970 CAPLUS
DOCUMENT NUMBER: 134:281069

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

TITLE: Preparation of C-aryl glucoside SGLT2 inhibitors
INVENTOR(S): **Ellsworth, Bruce**; Washburn, William N.; **Sher, Philip M.**; Wu, Gang; Meng, Wei
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001027128	A1	20010419	WO 2000-US27187		20001002
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NZ 518029	A	20040827	NZ 2000-518029		20001002
AU 781009	B2	20050428	AU 2000-78483		20001002
AT 295848	E	20050615	AT 2000-968595		20001002
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			US 2000-194615P	P	20000405
			WO 2000-US27187	W	20001002

OTHER SOURCE(S): MARPAT 134:281069
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Sodium dependent glucose transporters found in the intestine and kidney (SGLT2) inhibiting C-aryl glucoside compds. I where R1, R2, and R2a are independently hydrogen, OH, OR5, lower alkyl, CF3, OCHF2, OCF3, SR5i or halogen, or two of R1, R2 and R2a together with the carbons to which they are attached can form an annelated five, six or seven membered carbocycle or heterocycle; R3 and R4 are independently hydrogen, OH, OR5a, O-aryl, OCH2Aryl, lower alkyl, cycloalkyl, CF3, -OCHF2, -OCF3, halogen, -CN, -CO2R5b, -CO2H, -COR6b, -CH(OH)R6c, -CH(OR5h)R6d, -CONR6R6a, -NHCOR5c, -NHSO2R5d, -NHSO2Aryl, Aryl, -SR5e, -SOR5f, SO2R5g, SO2Aryl, or a five, six or seven membered heterocycle, or R3 and R4 together with the carbons to which they are attached form an annelated five, six or seven membered carbocycle or heterocycle; R5, R5a, R5b, R5c, R5d, R5e, R5f, R5g, R5h, and R5I are independently lower alkyl; R6, R6a, R6b, R6c and R6d are

independently hydrogen, alkyl, aryl, alkylaryl or cycloalkyl, or R6 and R6a together with the nitrogen to which they are attached form an annelated five, six or seven membered heterocycle; A is O, S, NH, or (CH2)n where n is 0-3. A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with another antidiabetic agent or other therapeutic agent. Thus, II was prepared as an antidiabetic agent other than an SGLT2 inhibitor, an agent for treating the complications of diabetes, an anti-obesity agent, an antihypertensive agent, an antiplatelet agent, an antiatherosclerotic agent, and/or a lipid-lowering agent (no data).

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	52.01	293.95

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-6.57	-6.57

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 AUG 2005 HIGHEST RN 862072-85-3
DICTIONARY FILE UPDATES: 29 AUG 2005 HIGHEST RN 862072-85-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
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Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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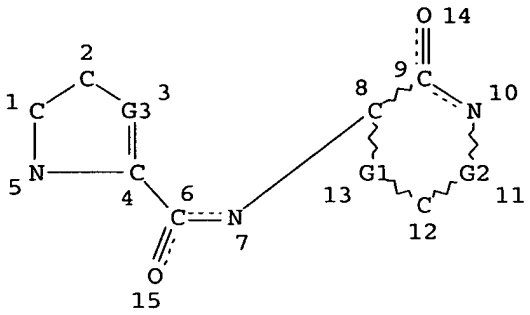
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

L39 STR



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REP G2=(0-1) CH
VAR G3=CH/N
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
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STEREO ATTRIBUTES: NONE
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Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

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     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   29 AUG 2005  HIGHEST RN 862072-85-3
     DICTIONARY FILE UPDATES:  29 AUG 2005  HIGHEST RN 862072-85-3

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

       Please note that search-term pricing does apply when
       conducting SmartSELECT searches.

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     * The CA roles and document type information have been removed from *
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* the IDE default display format and the ED field has been added,    *
* effective March 20, 2005.  A new display format, IDERL, is now     *
* available and contains the CA role and document type information.  *
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Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

FILE MEDLINE
 FILE LAST UPDATED: 27 AUG 2005 (20050827/UP).  FILE COVERS 1950 TO DATE.

 On December 19, 2004, the 2005 MeSH terms were loaded.

 The MEDLINE reload for 2005 is now available.  For details enter HELP
 RLOAD at an arrow promt (=>).  See also:

    http://www.nlm.nih.gov/mesh/
    http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

 OLDMEDLINE now back to 1950.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2005 vocabulary.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 25 August 2005 (20050825/ED)

FILE RELOADED: 19 October 2003.

FILE EMBASE
 FILE COVERS 1974 TO 25 Aug 2005 (20050825/ED)

 EMBASE has been reloaded. Enter HELP RLOAD for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

FILE CAPLUS

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FILE COVERS 1907 - 30 Aug 2005 VOL 143 ISS 10
FILE LAST UPDATED: 29 Aug 2005 (20050829/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	326.10	620.05

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-6.57

STN INTERNATIONAL LOGOFF AT 10:06:46 ON 30 AUG 2005

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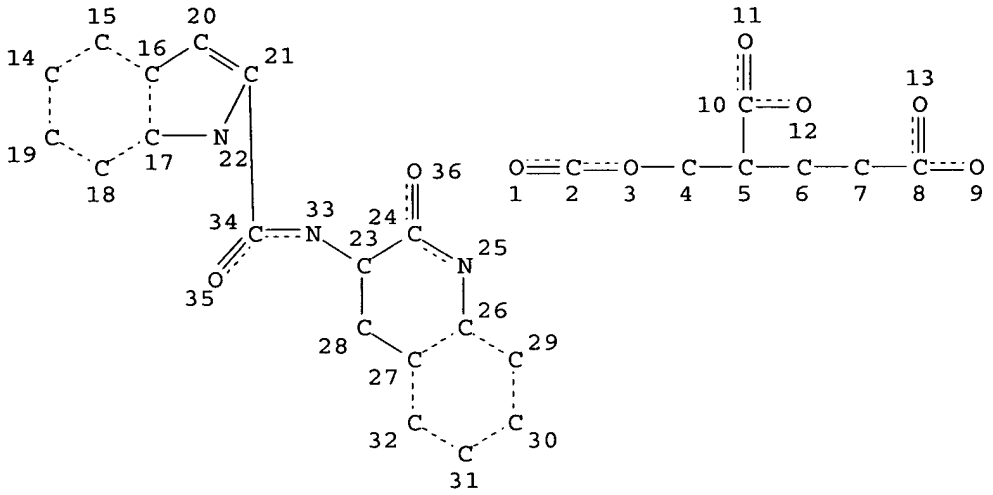

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS  36

STEREO ATTRIBUTES: NONE
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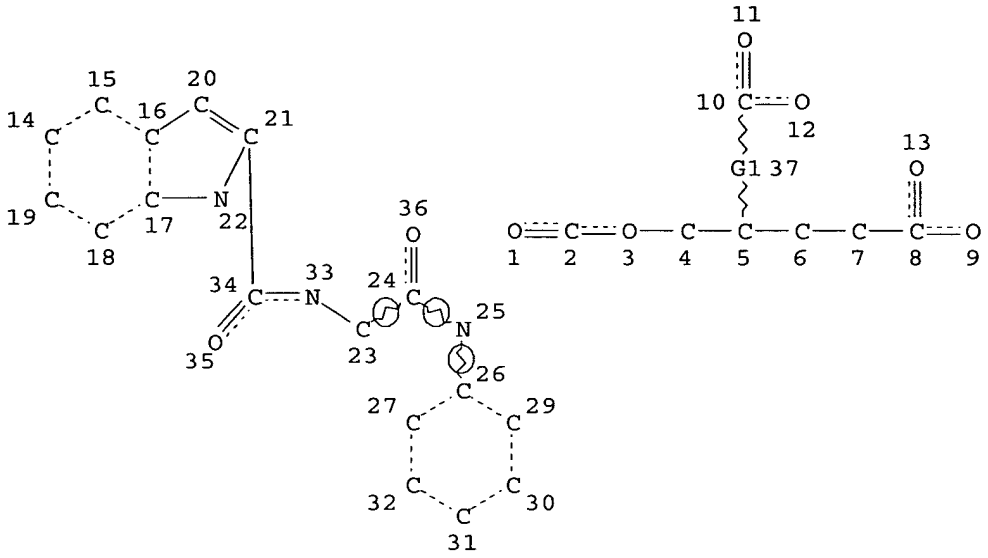

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NODE ATTRIBUTES:
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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 36

STEREO ATTRIBUTES: NONE
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SEARCH TIME: 00.00.01

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COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	326.96	327.17

FILE 'MEDLINE' ENTERED AT 11:11:34 ON 30 AUG 2005

FILE 'BIOSIS' ENTERED AT 11:11:34 ON 30 AUG 2005
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FILE 'CAPLUS' ENTERED AT 11:11:34 ON 30 AUG 2005
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L7 12 FILE MEDLINE

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

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L8          14 FILE BIOSIS
L9          13 FILE EMBASE
L10         39 FILE CAPLUS

TOTAL FOR ALL FILES
L11         78 GLYCOGEN PHOSPHORYLASE AND TRIGLYCER?

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PROCESSING COMPLETED FOR L11
L12          51 DUP REM L11 (27 DUPLICATES REMOVED)

=> d 1-51 ibib abs hitstr

L12  ANSWER 1 OF 51  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2005:638717  CAPLUS
DOCUMENT NUMBER:          143:139202
TITLE:                    Stabilized pharmaceutical solid compositions of
                          low-solubility drugs, poloxamers, and stabilizing
                          polymers
INVENTOR(S):              Crew, Marshall David; Shanker, Ravi Mysore; Smithey,
                          Daniel Tod; Miller, Warren Kenyon; Friesen, Dwayne
                          Thomas
PATENT ASSIGNEE(S):       Pfizer Products Inc., USA
SOURCE:                   PCT Int. Appl., 44 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2005065656         A2    20050721    WO 2004-IB4260          20041220
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                       US 2003-533848P     P  20031231
AB   Solid compns. with improved phys. stability comprise an amorphous,
     low-solubility drug, a poloxamer, and a stabilizing polymer. The compns.
     provide good phys. stability during storage and concentration enhancement of
     dissolved drug when administered to an aqueous environment of use.

L12  ANSWER 2 OF 51  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2005:300435  CAPLUS
DOCUMENT NUMBER:          142:373859
TITLE:                    Preparation of pyrimidine and pyridine derivatives
                          useful as HMG-CoA reductase inhibitors
INVENTOR(S):              Ahmad, Saleem; Robl, Jeffrey A.; Ngu, Khehyong
PATENT ASSIGNEE(S):       Bristol-Myers Squibb Company, USA
SOURCE:                   PCT Int. Appl., 103 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
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LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030758	A1	20050407	WO 2004-US31212	20040922
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005085497	A1	20050421	US 2004-946055	20040921
PRIORITY APPLN. INFO.:			US 2003-505893P	P 20030925

OTHER SOURCE(S): MARPAT 142:373859
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [X = N, CR5; R1-2 = H, alkyl, alkoxyalkyl, etc.; R3 = (hetero)aryl, cycloalkyl, etc.; R4 = H, (cyclo)alkyl, haloalkyl, etc.; R5 = H, alkyl; Z = hydroxyalkyl, etc.] are prepared For instance, II is prepared in 5 steps from a substituted pyrimidine, 2-methyl-2H-[1,2,4]triazol-3-ylamine, and a prior art homochiral dihydroxy acetonide derivative I are HMG-CoA reductase inhibitors and are active in inhibiting cholesterol biosynthesis, modulating blood serum lipids, for example, lowering LDL cholesterol and/or increasing HDL cholesterol, and treating hyperlipidemia, dyslipidemia, hormone replacement therapy, hypercholesterolemia, hypertriglyceridemia and atherosclerosis as well as Alzheimer's disease and osteoporosis [no data].
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:417180 CAPLUS
DOCUMENT NUMBER: 143:25649
TITLE: Regulation of nutrient and energy metabolism by the autonomic nervous system and food elements
AUTHOR(S): Shimazu, Takashi
CORPORATE SOURCE: Dep. Nutr. Health Promotion, Fac. Human Life Sci., Hiroshima Jogakuin Univ., Hiroshima, 732-0063, Japan
SOURCE: Nippon Eiyo, Shokuryo Gakkaishi (2005), 58(2), 113-120
CODEN: NESGDC; ISSN: 0287-3516
PUBLISHER: Nippon Eiyo, Shokuryo Gakkai
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
AB A review on the author's studies conducted over 40 years or more on neural regulation of nutrient, energy metabolism and energy expenditure by effective constituents of food flavors. (1) Direct neural regulation of nutrient metabolism in the liver was demonstrated by stimulation of the ventromedial hypothalamic (VMH)-sympathetic nervous system, which - independently of

hormonal effects - caused glycogenolysis by rapid activation of **glycogen phosphorylase**, whereas stimulation of the lateral hypothalamic (LH)-parasympathetic nerve system resulted in glycogenesis by activation of glycogen synthase in the liver. Direct neural regulation of hepatic metabolism was further verified by studying perfused liver ex vivo; the involvement of neuropeptides and certain cytokines, in addition to noradrenaline (NA), in the mechanism of nerve-signal transmission was demonstrated. (2) Extension of studies on the central nervous system regulation of energy metabolism revealed that stimulation of the VMH-sympathetic nervous system causes not only lipolysis in white and brown adipose tissue (BAT), but also lipogenesis in BAT preferentially. This indicates that the VMH-sympathetic nerves enhance **triglyceride** synthesis and breakdown (i.e., turnover of **triglycerides**), which leads to heat production and energy dissipation unique to BAT. Disorder of this regulatory system in rats decreases the body's energy expenditure and leads to obesity. (3) Skeletal muscles comprise the major working tissue involved in resting-energy metabolism It was demonstrated that VMH stimulation also enhanced glucose uptake and utilization in the heart, skeletal muscles and BAT selectively, through mediation of direct sympathetic innervation. Anal. of the mechanism underlying this sympathetic regulation revealed that the sympathetic neurotransmitter NA enhances glucose uptake independently of insulin, but possibly via β3-adrenergic receptors and activation of GLUT-1 glucose transporters present in the plasma membrane. Microinjection of leptin into the VMH also increased glucose uptake into skeletal muscles through sympathetic facilitation as well as β-oxidation of fatty acids through a novel signaling pathway involving AMP-kinase. (4) It has been considered that some food flavors or spices promote energy expenditure by stimulating gustatory receptors coupled with sympathetic activation. In fact, the effective components of ginger and raspberry, zingerone and raspberry ketone, were shown to have stimulatory effects on energy expenditure by increasing oxygen consumption an decreasing the RQ, resulting in amelioration of the abnormal lipid metabolism induced by ingestion of a high-fat diet.

L12 ANSWER 4 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:1156566 CAPLUS
DOCUMENT NUMBER: 142:94061
TITLE: Preparation of pyrazole glycoside compounds as SGLT inhibitors
INVENTOR(S): Kikuchi, Norihiko; Fujikura, Hideki; Tazawa, Shigeki; Yamato, Tokuhisa; Isaji, Masayuki
PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004113359	A1	20041229	WO 2004-JP8695	20040615

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2003-175663 A 20030620

OTHER SOURCE(S): MARPAT 142:94061

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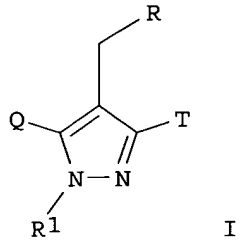

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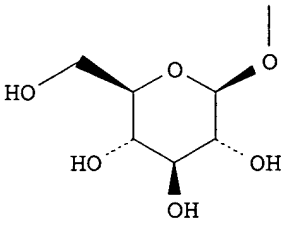

II

AB Title compds. I [R1 = H, (un)substituted alkyl, etc.; one of Q and T is II, etc.; the other is Z-Ar; Z = O, etc.; Ar = aryl, etc.; R = (un)substituted cycloalkyl, etc.] were prepared For example, glycosidation of 1-isopropyl-4-(4-methoxybenzyl)-5-phenoxyl-1,2-dihydro-3H-pyrazol-3-one by 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl bromide in the presence of benzyltributylammonium chloride followed by deacetylation using sodium methoxide afforded compound I [R1 = isopropyl; R = 4-methoxyphenyl; Q = phenoxy; T = II]. In SMINT inhibition assays, the IC50 value of compound I [R1 = isopropyl; R = 4-methoxyphenyl; Q = phenoxy; T = II] was 700 nM. Of note, compds. I have SGLT inhibition activity (no data provided). Compds. I are claimed useful for the treatment of diabetes, obesity, etc.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:857613 CAPLUS

DOCUMENT NUMBER: 141:332411

TITLE: Preparation of glucopyranoside compounds having fused heterocycle as SGLT inhibitors

INVENTOR(S): Fushimi, Nobuhiko; Yonekubo, Shigeru; Muranaka, Hideyuki; Shiohara, Hiroaki; Teranishi, Hirotaka; Shimizu, Kazuo; Ito, Fumiaki; Isaji, Masayuki

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 179 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087727	A1	20041014	WO 2004-JP4009	20040324
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004300102	A2	20041028	JP 2003-97152	20030331

PRIORITY APPLN. INFO.: JP 2003-97152 A 20030331
OTHER SOURCE(S): MARPAT 141:332411
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = H, halo, etc.; R2 = H, halo, alkyl; R3, R4 = H, OH, etc.; Y = O, S, (un)substituted NH with alkyl, haloalkyl; Q = alkylene, etc.; A = aryl, heteroaryl; G = II, III] were prepared For example, glycosidation of 6-benzyloxy-4-hydroxy-3-(2-phenylethyl)benzofuran with 2,3,4,6-tetra-O-acetyl-1-O-trichloroacetimidoyl-α-D-glucopyranose in the presence of BF3·OEt2 followed by debenzylation, deacetylation afforded compound IV. In SGLT1 (sodium/glucose cotransporter 1) inhibition assays, the IC50 value of compound IV was 15 nM. Compds. I are claimed useful for the treatment of diabetes, obesity, etc.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:756707 CAPLUS
DOCUMENT NUMBER: 141:277497
TITLE: Preparation of benzoylureidopyridylpiperidines for the treatment of type 2 diabetes
INVENTOR(S): Schoenafinger, Karl; Kadereit, Dieter; Defossa, Elisabeth; Herling, Andreas; Klabunde, Thomas
PATENT ASSIGNEE(S): Aventis Pharma Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078743	A1	20040916	WO 2004-EP1735	20040221
W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN,				

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LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX,
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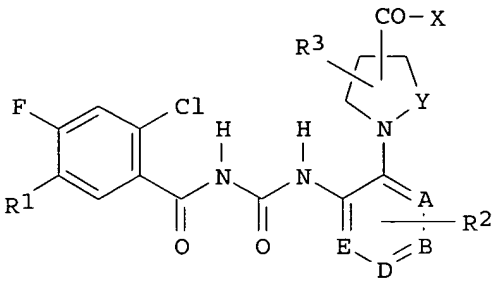
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG

DE 10309929	A1	20041202	DE 2003-10309929	20030307
US 2004266768	A1	20041230	US 2004-795863	20040308
PRIORITY APPLN. INFO.:			DE 2003-10309929	A 20030307
			US 2003-487497P	P 20030715

OTHER SOURCE(S): MARPAT 141:277497
GI



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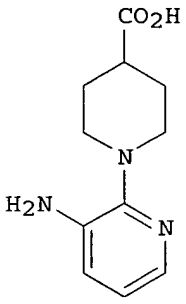

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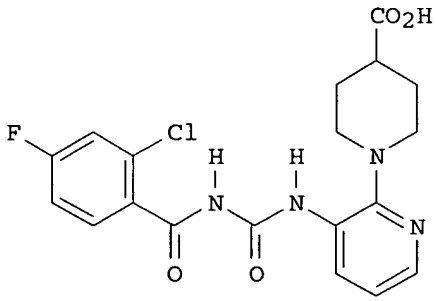

III

AB Title compds. I [R1, R2 = H, halo, alkyl, etc.; R3 = H, alkyl, O-alkyl, etc.; X = OH, O-alkyl, NH2, etc.; A, B, D, E = CH, N, with the proviso that one of A, B, D or E is N; Y = (CH2)m; m = 0-2] and their pharmaceutically acceptable salts were prepared For example, condensation of amine II, e.g., prepared from 2-chloro-3-nitropyridine in 2-steps, and 2-chloro-4-fluorobenzoylisocyanate, afforded ureidopyridylpiperidine III. In activated **glycogen phosphorylase** inhibition assays, 4-examples of compds. I exhibited IC50 values ranging from 0.01-3.65 μM, the IC50 value of benzoylurea III was 0.04 μM. Compds. I were claimed useful for the treatment of type 2 diabetes.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:648488 CAPLUS
DOCUMENT NUMBER: 141:173977
TITLE: Preparation of substituted anilide ligands for the thyroid receptor
INVENTOR(S): Washburn, William N.; Meng, Wei; Ryono, Denis E.; Ellsworth, Bruce A.; Ericsson, Thomas; Rahimi-Ghadim, Mahmoud; Garg, Neeraj; Malm, Johan
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA; Karo Bio AB
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004067482	A2	20040812	WO 2004-US1985	20040123
WO 2004067482	A3	20041021		
W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI				
US 2004180940	A1	20040916	US 2004-763878	20040123
PRIORITY APPLN. INFO.:			US 2003-442421P P	20030124
OTHER SOURCE(S):	MARPAT 141:173977			

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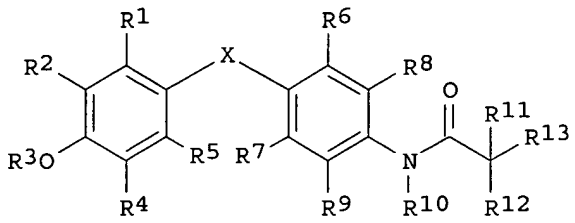

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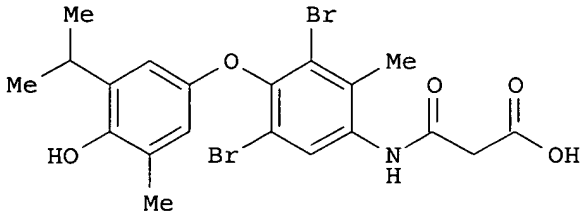

II

AB Title compds. I [wherein X = O, Se, S, SO, SO2, CO, CH2, NH; R1 = H, halo, CF3, alkyl; R2 = halo, CF3, (cyclo)alkyl, (cyclo)alkenyl, alkynyl, (hetero)aryl(oxy), (cyclo)alkoxy, arylalkoxy, COR14, CR14(OR10)R15, NR14COR15, CONR14R15, NR14SO2R16, SO2NR14R15, SR16, SOR16, SO2R16, CH2NR14R15; R3 = halo, alkyl; R5 = H, halo, alkyl; R6, R7 = independently H, halo, CN, (cyclo)alkyl; R8, R9 = independently H, halo, alkoxy, OH, CN,

CF3, alkyl; R10 = independently H, alkyl; R11 = CO2R14; R12, R13 = independently H, halo, alkyl; R14, R15 = independently H, (cyclo)alkyl, (hetero)aryl(alkyl); R16 = independently (cyclo)alkyl, (hetero)aryl(alkyl); with provisos; and prodrugs, stereoisomers, and pharmaceutically acceptable salts thereof] were prepared as thyroid receptor ligands (no data). For example, 3-isopropyl-5-methylphenol was converted to 3-isopropyl-5-methyl-4-acetoxyphenol in a 3-step sequence. Bromination followed by iodination of 3-methyl-4-nitrophenol gave 3,5-dibromo-4-iodo-2-methylnitrobenzene, which was coupled with 3-isopropyl-5-methyl-4-acetoxyphenol to afford the di-Ph ether. Reduction of the nitro group to the amine using Fe in H2O/AcOH, followed by reductive amidation with Et malonyl chloride provided II. I or pharmaceutical compns. of I, alone or in combination with other therapeutic agents, are expected to be useful for preventing, inhibiting, or treating diseases or disorders associated with metabolic dysfunction or which are dependent upon the expression of a T3 regulated gene (no data).

L12 ANSWER 8 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:648329 CAPLUS
DOCUMENT NUMBER: 141:190601
TITLE: Preparation of cycloalkyl-containing anilide derivatives as thyroid receptor ligands
INVENTOR(S): Washburn, William N.; Meng, Wei
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004066929	A2	20040812	WO 2004-US1779		20040123
WO 2004066929	A3	20041216			
W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI					
US 2004176425	A1	20040909	US 2004-764118		20040123
PRIORITY APPLN. INFO.:			US 2003-442659P	P	20030124

OTHER SOURCE(S): MARPAT 141:190601
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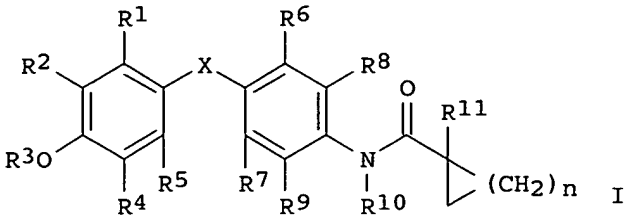

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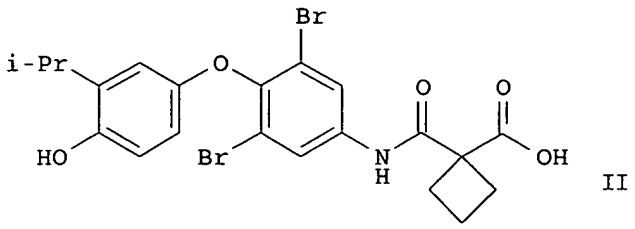

II

AB Title compds. presented by the general formula I [wherein X = O, Se, S, SO, SO2, CO, CH2, NH; R1 = H, halo, CF3, alkyl; R2 = halo, CF3, (cyclo)alkyl, alkenyl, etc.; R3 = H, alkyl, benzyl, aroyl, alkanoyl; R4, R5 = independently H, halo, alkyl; R6, R7 = independently H, halo, cyano, (cyclo)alkyl; R8, R9 = independently selected from H, halo, alkoxy, hydroxy, cyano, CF3, alkyl; R10 = H or alkyl; R11 = carboxylic acid ester or tetrazole; n = 1-4; and all prodrugs, stereoisomers, and pharmaceutically acceptable salts thereof] were prepd as thyroid receptor ligands (no data). For example, II was given in a multiple-step synthesis starting from the reaction of bis(3-isopropyl-4-methoxyphenyl)iodonium tetrafluoroborate with 2,6-dibromo-4-nitrophenol. Thus, I and their pharmaceutical compns. are useful as the thyroid receptor ligands for preventing, inhibiting or treating diseases or disorders associated with metabolic dysfunction or which are dependent upon the expression of a T3 regulated gene, wherein a compound as described above is administered in a therapeutically effective amt (no data).

L12 ANSWER 9 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:60473 CAPLUS
DOCUMENT NUMBER: 140:128423
TITLE: Preparation of heterocyclylbenzoylureas for treating type 2 diabetes
INVENTOR(S): Schoenafinger, Karl; Defossa, Elisabeth; Kadereit, Dieter; Von Roedern, Erich; Klabunde, Thomas; Burger, Hans-Joerg; Herling, Andreas; Wendt, Karl-Ulrich
PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004007455	A1	20040122	WO 2003-EP7078	20030703

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10231627	A1	20040205	DE 2002-10231627		20020712
DE 10306503	A1	20040826	DE 2003-10306503		20030217
DE 10320326	A1	20041202	DE 2003-10320326		20030506
CA 2493374	AA	20040122	CA 2003-2493374		20030703
EP 1523475	A1	20050420	EP 2003-763692		20030703
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
BR 2003012697	A	20050426	BR 2003-12697		20030703
US 2004152743	A1	20040805	US 2003-617498		20030711
PRIORITY APPLN. INFO.:			DE 2002-10231627	A	20020712
			DE 2003-10306503	A	20030217
			DE 2003-10320326	A	20030506
			US 2002-430782P	P	20021204
			WO 2003-EP7078	W	20030703

OTHER SOURCE(S): MARPAT 140:128423
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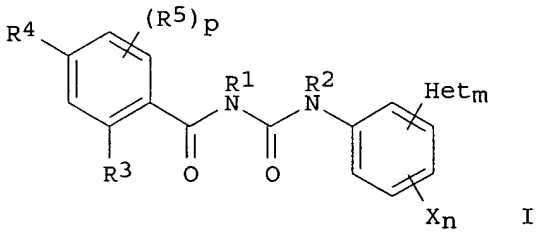

I

AB Title compds. [I; R1, R2 = H, (substituted) A, OA, COA, CO2A, AlkCO2H, AlkCO2A; A = alkyl; Alk = alkylene; R3, R4 = F, Cl, Br, OH, NO2, CN, (substituted) A, OA, alkenyloxy, alkynyl; R5 = H, F, Cl, Br, OH, NO2, CN, (substituted) A, OA, COA, AlkCO2H, AlkCO2A, SO2A, alkenyloxy, alkynyl; X = H, F, Cl, Br, OH, NO2, CN, (substituted) A, COA, AlkCO2H, AlkCO2A, SO2A, alkenyl, alkynyl, OA, SO1-2A, NHA, NA2, CO2H, CO2A, CONH2, CONHA, CONA2, SO2NH2, SO2NHA, SO2NA2, NHCOR6; R6 = H, A, cycloalkyl, cycloalkylalkylene, alkenyl, alkynyl, AlkCO2A, AlkCOA, AlkCO2H, AlkCONH2, aryl, Alkaryl, heteroaryl, Alkheteroaryl, heteroarylcarbonyl; het = 4-7 membered (substituted) heterocyclyl, with the exception of pyrrole; m = 1-5; n, p = 0-3], were prepared Thus, 1-(4-amino-3-fluorophenyl)-1H-[1,2,4]triazole (preparation given) and 2-chloro-4,5-difluorobenzoylisocyanate were stirred 30 min in MeCN to give 1-(2-chloro-4,5-difluorobenzoyl)-3-(2-fluor-4-[1,2,4]triazol-1-ylphenyl)urea. The latter at 10 μM gave 94% inhibition of activated **glycogen phosphorylase.**

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:589248 CAPLUS
DOCUMENT NUMBER: 141:140474
TITLE: **Triglyceride** and **triglyceride**-like prodrugs of **glycogen phosphorylase** inhibiting compounds

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

INVENTOR(S): Sher, Philip M.; Ellsworth, Bruce A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 43 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004142938	A1	20040722	US 2003-712823		20031113
PRIORITY APPLN. INFO.:			US 2002-426465P	P	20021114

OTHER SOURCE(S): MARPAT 141:140474
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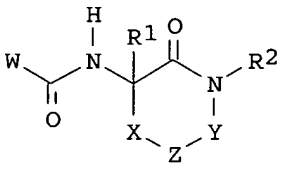

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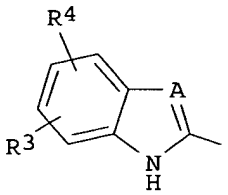
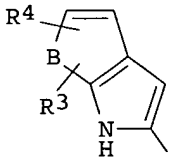


= W1



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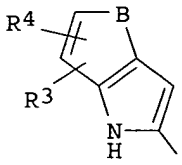

= W3

AB Prodrugs of **glycogen phosphorylase** inhibiting compds. are provided, said prodrug compds., G(-O2CR')m(-OH)n(-O2C(CH2)pCH3)q [G = branched or straight C3-5-carbon chain and (-O2CR'), (-OH) and (-O2C(CH2)pCH3) are attached to any available carbon atom along G; m = 1 - 4; n = 0 - 3; p = 0 - 16; q = 0 - 3; where m + n + q = 3 or 4; and -O2CR' is a fragment of a compound I wherein W = W1, W2, W3; X = O, S, SO2, CHR5, , CHR5O, CHR5S, CHR5SO2, CHR5CO, CH2CHR5; Y = bond, CHR6; Z = aryl, heteroaryl; R1 =H, alkyl, alkenyl; R2 = H, alkyl, aryl, arylalkyl, heteroarylalkyl, alkenyl; R3, R4 = H, halo, CF3, CN, alkyl, alkoxy; R5, R6 = H, alkyl, aryl, alkenyl, CN, CN4R9A (tetrazole), CO2R9A, CONR9AR9B, CONR9AOR9B; A = CH, N; B = O, S; wherein R1, R2, R5, R6, R7, R8 = alkyl, aryl, alkenyl, arylalkyl,heteroarylalkyl, alkoxy, aryloxy and each may be substituted with 1 - 3 hydrogen bonding groups]. Thus, 3-[(5-chloroindolecarbonyl)amino]-3,4-dihydrocarbostyril I (R1 = R2 = H, W = 5-chloroindole, X = CH2, YZ = benzo) was prepared from 3-amino-3,4-dihydrocarbostyril via acylation with 5-chloroindolecarboxylic acid resin-bound 2,3,5,6-tetrafluorophenyl ester. Further provided are pharmaceutical compns. and methods for treating diabetes and related diseases employing compds. above, either alone or in combination with another therapeutic agent.

L12 ANSWER 11 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:392331 CAPLUS
DOCUMENT NUMBER: 140:406798
TITLE: Preparation of benzoxepinopyridines as HMG-CoA reductase inhibitors
INVENTOR(S): Robl, Jeffrey A.; Chen, Bang-chi; Sun, Chong-qing
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U.S. Ser. No. 875,155, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004092573	A1	20040513	US 2003-602752		20030624
US 6812345	B2	20041102			
US 2002013334	A1	20020131	US 2001-875155		20010606
PRIORITY APPLN. INFO.:			US 2000-211595P	P	20000615
			US 2001-875155	B2	20010606

OTHER SOURCE(S): MARPAT 140:406798
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [X = O, S, SO, SO2, NR7; Z = HOCHCH2CH(OH)CH2CO2R3, 4-hydroxy-2-oxopyran-6-yl, etc.; n = 0, 1; R1, R2 = alkyl, arylalkyl, cycloalkyl, alkenyl, cycloalkenyl, aryl, heteroaryl, cycloheteroalkyl; R3 = H, alkyl, metal ion; R4 = H, halo, CF3, etc.; R7 = H, alkyl, aryl, alkanoyl, aroyl, alkoxycarbonyl, etc.; R9, R10 = H, alkyl], were prepared as HMG CoA reductase inhibitors active in inhibiting cholesterol biosynthesis, modulating blood serum lipids such as lowering LDL cholesterol and/or increasing HDL cholesterol, and treating hyperlipidemia, hypercholesterolemia, hypertriglyceridemia and atherosclerosis (no data). A multistep synthesis of II is reported.
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:3661 CAPLUS
DOCUMENT NUMBER: 140:73181
TITLE: Lactam **glycogen phosphorylase** inhibitors and their use in disease treatment
INVENTOR(S): Sher, Philip; Wu, Gang; Stouch, Terry; Ellsworth, Bruce
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 51 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 2004002495	A1	20040101	US 2003-440851	20030519
PRIORITY APPLN. INFO.:			US 2002-382002P P	20020520
OTHER SOURCE(S):	MARPAT 140:73181			

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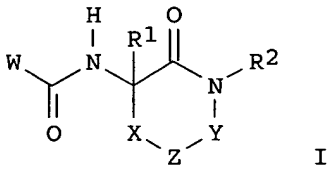

I

AB Lactams I (W = bicyclic heteroaryl; X = O, S, SO2, CHR3, CHR3O, CHR3S, CHR3SO2, CHR3CO, CH2CHR3; Y = bond, CHR3; Z = aryl, heteroaryl; R1 = H, alkyl, aryl, alkenyl; R2 = H, alkyl, aryl, arylalkyl, heteroarylalkyl, alkenyl; R3 = H, alkyl, aryl, alkenyl, CN, tetrazole derivative, CO2R4, CONR4R4, CONR4OR4; R4 = H, alkyl, aryl, arylalkyl, heteroarylalkyl, etc.) which are **glycogen phosphorylase** inhibitors are disclosed. Further provided is a method for treating diabetes and related diseases employing a **glycogen phosphorylase** inhibiting amount of the above compound, either alone or in combination with another therapeutic agent. Thus, the syntheses of 3-(5-chloroindole-2-carbonylamino)-5-methoxy-3,4-dihydrocarbostyril and 3-(5-chloroindole-2-carbonylamino)-2,3,4,5-tetrahydro-1H-1-benzazepin-2-one, and numerous other related compds., are described.

L12 ANSWER 13 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	2004:307319 CAPLUS
DOCUMENT NUMBER:	140:321117
TITLE:	Preparation of benzoylureas for the treatment of diabetes mellitus
INVENTOR(S):	Defossa, Elisabeth; Kadereit, Dieter; Klabunde, Thomas; Burger, Hans-Joerg; Herling, Andreas; Wendt, Karl-Ulrich; Von Roedern, Erich; Schoenafinger, Karl; Enhsen, Alfons
PATENT ASSIGNEE(S):	Aventis Pharma Deutschland GmbH, Germany
SOURCE:	Ger. Offen., 14 pp. CODEN: GWXXBX
DOCUMENT TYPE:	Patent
LANGUAGE:	German
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10246434	A1	20040415	DE 2002-10246434	20021004
DE 10246434	B4	20050804		
CA 2500763	AA	20040422	CA 2003-2500763	20030922
WO 2004033416	A2	20040422	WO 2003-EP10501	20030922
WO 2004033416	A3	20040513		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1556339	A2	20050727	EP 2003-757879		20030922

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003014861	A	20050802	BR 2003-14861		20030922
US 2004157922	A1	20040812	US 2003-679550		20031006
PRIORITY APPLN. INFO.:			DE 2002-10246434	A	20021004
			US 2003-444890P	P	20030204
			WO 2003-EP10501	W	20030922

OTHER SOURCE(S): MARPAT 140:321117

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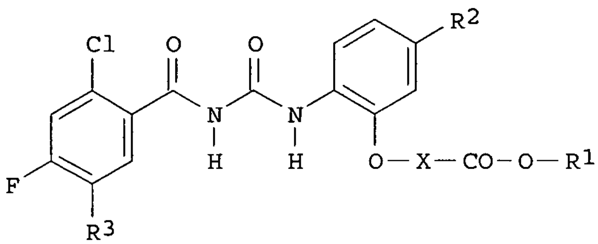

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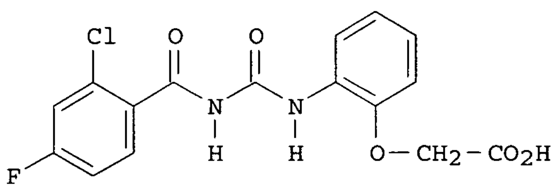


II

AB Title compds. I [X = (CH2)n; R1 = H, alkyl, alkyl-Ph, etc.; R2 = H, alkyl, O-alkyl, etc.; R3 = N, F, Cl, Br, etc.; n = 1-8] and their pharmaceutically acceptable salts were prepared For example, condensation of 2-aminophenoxyacetic acid tert-Bu ester, e.g., prepared from 2-nitrophenol in 2-steps, and 2-chloro-4-fluorobenzoylisocyanate, followed by Boc deprotection, afforded benzoylurea II. In activated **glycogen phosphorylase** inhibition assays, 15-examples of compds. I exhibited IC50 values ranging from 0.032-1.19 μM, the IC50 value of benzoylurea II was 1.16 μM. Compds. I were claimed useful for the treatment of type 2 diabetes.

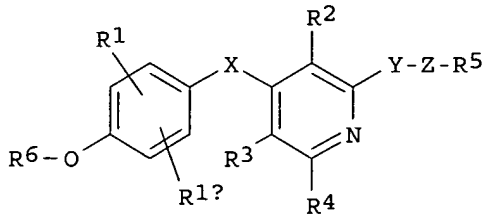
L12 ANSWER 14 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:912945 CAPLUS
DOCUMENT NUMBER: 139:395820
TITLE: Preparation of pyridine-based selective thyroid receptor β agonists
INVENTOR(S): Zhang, Minsheng; Hangeland, Jon; Caringal, Yolanda; Friends, Todd
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003094845	A2	20031120	WO 2003-US14222	20030507
WO 2003094845	A3	20040304		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004039028	A1	20040226	US 2003-431269	20030507
US 6747048	B2	20040608		

PRIORITY APPLN. INFO.: US 2002-378497P P 20020508
OTHER SOURCE(S): MARPAT 139:395820
GI



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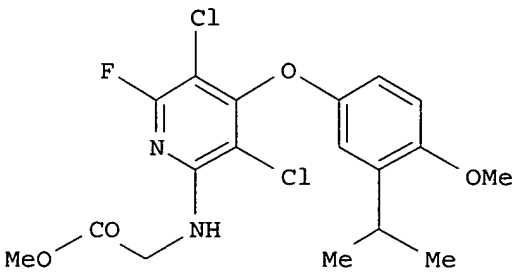


II

AB Novel pyridine-based thyroid receptor ligands (shown as I; variables defined below; e.g. II) and pharmaceutical compns. containing I as selective agonists of thyroid receptor β (no data) are claimed. For I: X is O, S, S(O), SO2, CR8R8' or NR8; Y is NR8, O, CH2 or S; Z is a bond or (un)substituted C1-4 alkyl; addnl. details are given in the claims. A method is provided for preventing, inhibiting or treating diseases or disorders associated with metabolism dysfunction or which are dependent upon the expression of a T3 regulated gene (no data), wherein a compound I is administered in a therapeutically effective amount Although the methods of preparation are not claimed, 57 example prepns. of I and characterization data for .apprx.200 more I are included.

L12 ANSWER 15 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:892617 CAPLUS
DOCUMENT NUMBER: 139:358786
TITLE: Treatment of diabetes and diabetic complications with sodium-hydrogen exchanger type 1 (NHE-1) inhibitors
INVENTOR(S): Tracey, Wayne Ross; Treadway, Judith Lee
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003092694	A1	20031113	WO 2003-IB1639		20030422
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2483927	AA	20031113	CA 2003-2483927		20030422
EP 1499317	A1	20050126	EP 2003-715232		20030422
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
BR 2003009707	A	20050209	BR 2003-9707		20030422
PRIORITY APPLN. INFO.:			US 2002-380028P	P	20020502
			WO 2003-IB1639	W	20030422

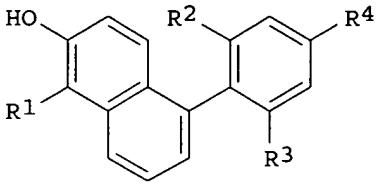
OTHER SOURCE(S): MARPAT 139:358786
AB The invention provides methods for treating or preventing type 2 diabetes, diabetic neuropathy, diabetic cardiomyopathy, cataracts, diabetic retinopathy, foot ulcers, diabetic microangiopathy, diabetic macroangiopathy, diabetic ischemia-reperfusion injury, diabetic cardiac ischemia-reperfusion injury and/or insulin resistance syndrome (IRS) in mammals, particularly in humans, by administering a sodium-hydrogen exchanger type 1 (NHE-1) inhibitor or a pharmaceutical composition containing such an inhibitor. The invention also provides combinations comprising NHE-1 inhibitors and a second pharmaceutical agent, the combinations being useful in treating type 2 diabetes, IRS, diabetic neuropathy, diabetic cardiomyopathy, cataracts, diabetic retinopathy, foot ulcers, diabetic ischemia-reperfusion injury, diabetic cardiac ischemia-reperfusion injury, diabetic microangiopathy and/or diabetic macroangiopathy.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 16 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:696551 CAPLUS
DOCUMENT NUMBER: 139:214218
TITLE: Preparation of phenyl-naphthol ligands for the thyroid hormone receptor
INVENTOR(S): Hangeland, Jon J.
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: U.S. Pat. Appl. Publ., 21 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003166724	A1	20030904	US 2002-313864	20021206
US 6831102	B2	20041214		
US 2005038122	A1	20050217	US 2004-946162	20040921
US 2005054727	A1	20050310	US 2004-946376	20040921
PRIORITY APPLN. INFO.:			US 2001-337760P	P 20011207
			US 2002-313864	A3 20021206

OTHER SOURCE(S): MARPAT 139:214218
GI



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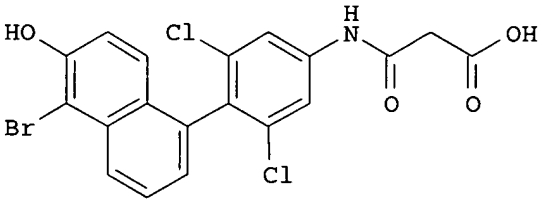


II

AB Title compds. I [R1 = halo, CF3, aryl, alkyl, cycloalkyl; R2-3 = H, halo, alkyl, cycloalkyl; R4 = (CH2)nCOOH, (CH2)COOH, NHCO(CH2)COOH, CONH(CH2)nCOOH, NH(CH2)mCOOH; n = 0-4; m = 1-4] are prepared as thyroid receptor ligands. For instance, 6-methoxynaphthalen-1-ol is converted to the pinacol boronate ester via the triflate. This is coupled to the triflate of 2,6-dichloro-4-nitrophenol (DME, Pd(PPh3)4, Na2CO3, 80°, 30 min), the resulting biaryl brominated (CH2Cl2, Br2), reduced to the aniline (HOAc, Fe), coupled to Et 3-chloro-3-oxopropanoate, demethylated (CH2Cl2, BBr3, 0°, 30 min) and saponified to give II. I are useful for preventing, inhibiting or treating a disease associated with metabolism dysfunction or which is dependent upon the expression of a T3 regulated gene.

REFERENCE COUNT: 91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 17 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:338796 CAPLUS
DOCUMENT NUMBER: 139:128271
TITLE: Dual PPARα/γ activation provides enhanced improvement of insulin sensitivity and glycemic

control in ZDF rats
AUTHOR(S): Brand, Christian L.; Sturis, Jeppe; Gotfredsen, Carsten F.; Fleckner, Jan; Fledelius, Christian; Hansen, Bo F.; Andersen, Birgitte; Ye, Ji-Ming; Sauerberg, Per; Wassermann, Karsten
CORPORATE SOURCE: Research and Development, Novo Nordisk, Bagsvaerd, DK-2880, Den.
SOURCE: American Journal of Physiology (2003), 284(4, Pt. 1), E841-E854
CODEN: AJPHAP; ISSN: 0002-9513
PUBLISHER: American Physiological Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Improvement of insulin sensitivity and lipid and glucose metabolism by coactivation of both nuclear peroxisome proliferator-activated receptor (PPAR)γ and PPARα potentially provides beneficial effects over existing PPARγ and α preferential drugs, resp., in treatment of type 2 diabetes. The authors examined the effects of the dual PPARα/γ agonist ragaglitazar on hyperglycemia and whole body insulin sensitivity in early and late diabetes stages in Zucker diabetic fatty (ZDF) rats and compared them with treatment with the PPARγ preferential agonist rosiglitazone. Despite normalization of hyperglycemia and Hb A1c and reduction of plasma **triglycerides** by both compds. in both prevention and early intervention studies, ragaglitazar treatment resulted in overall reduced circulating insulin and improved insulin sensitivity to a greater extent than after treatment with rosiglitazone. In late-intervention therapy, ragaglitazar reduced Hb A1c by 2.3% compared with 1.1% by rosiglitazone. Improvement of insulin sensitivity caused by the dual PPARα/γ agonist ragaglitazar seemed to have beneficial impact over that of the PPARγ-preferential activator rosiglitazone on glycemic control in frankly diabetic ZDF rats.
REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

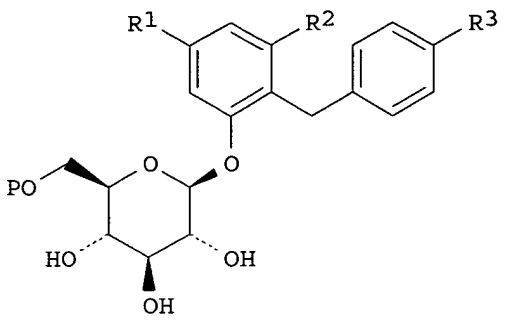
L12 ANSWER 18 OF 51 MEDLINE on STN
ACCESSION NUMBER: 2003227423 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12713515
TITLE: Additivity of adrenaline and contractions on hormone-sensitive lipase, but not on **glycogen phosphorylase**, in rat muscle.
AUTHOR: Langfort J; Ploug T; Ihlemann J; Baranczuk E; Donsmark M; Gorski J; Galbo H
CORPORATE SOURCE: Laboratory of Experimental Pharmacology, The Polish Academy of Sciences, Warsaw, Poland.
SOURCE: Acta physiologica Scandinavica, (2003 May) 178 (1) 51-60. Journal code: 0370362. ISSN: 0001-6772.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200306
ENTRY DATE: Entered STN: 20030517
Last Updated on STN: 20030608
Entered Medline: 20030606
AB AIM: Hormone-sensitive lipase (HSL) has been proposed to regulate triacylglycerol (TG) breakdown in skeletal muscle. In muscles with different fibre type compositions the influence on HSL of two major stimuli causing TG mobilization was studied. METHODS: Incubated soleus and extensor digitorum longus (EDL) muscles from 70 g rats were stimulated by adrenaline (5.5 microm, 6 min) or contractions (200 ms tetani, 1 Hz, 1

min) in maximally effective doses or by both adrenaline and contractions. RESULTS: Hormone-sensitive lipase activity was increased significantly by adrenaline as well as contractions, and the highest activity ($P < 0.05$) was seen with combined stimulation [Soleus: 0.40 +/- 0.03 (SE) m-unit mg protein(-1) (basal), 0.65 +/- 0.02 (adrenaline), 0.65 +/- 0.03 (contractions), 0.78 +/- 0.03 (adrenaline and contractions); EDL: 0.18 +/- 0.01, 0.30 +/- 0.02, 0.26 +/- 0.02, 0.32 +/- 0.01]. **Glycogen phosphorylase** activity was always increased more by adrenaline compared with contractions [Soleus: 60 +/- 4 (a/a + b)% vs. 46 +/- 3 ($P < 0.05$); EDL: 60 +/- 5 vs. 39 +/- 6 ($P < 0.05$)]. After combined stimulation **glycogen phosphorylase** activity in soleus [59 +/- 3 (a/a + b)%] was identical to and in EDL [45 +/- 4 (a/a + b)%] smaller ($P < 0.05$) than the activity after adrenaline only. CONCLUSIONS: In slow-twitch oxidative as well as in fast-twitch glycolytic muscle HSL is activated by both adrenaline and contractions. These stimuli are partially additive indicating at least partly different mechanisms of action. Contractions may impair the enhancing effect of adrenaline on **glycogen phosphorylase** activity in muscle.

L12 ANSWER 19 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:637688 CAPLUS
DOCUMENT NUMBER: 137:185757
TITLE: Preparation of glucopyranosyloxybenzylbenzene derivatives as inhibitors of human SGLT2 (sodium-dependent glucose-transporter 2) activity and medicinal use thereof
INVENTOR(S): Fushimi, Nobuhiko; Tatani, Kazuya; Fujikura, Hideki; Nishimura, Toshihiro; Fujioka, Minoru; Nakabayashi, Takeshi; Isaji, Masayuki
PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 145 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002064606	A1	20020822	WO 2002-JP1178		20020213
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2437240	AA	20020822	CA 2002-2437240		20020213
EP 1367060	A1	20031203	EP 2002-701540		20020213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
US 2004138148	A1	20040715	US 2004-467823		20040113
PRIORITY APPLN. INFO.:			JP 2001-37729	A	20010214
			WO 2002-JP1178	W	20020213

OTHER SOURCE(S): MARPAT 137:185757
GI



I

AB 2-Benzylphenyl β-D-glucopyranoside derivs. represented by the following general formula (I) and pharmacol. acceptable salts thereof [wherein P = H, a group constituting a prodrug; R1 = H, NH2, mono- or di(lower alkyl)amino, carbamoyl, lower alkyl, lower alkoxy, lower alkoxy-lower alkyl, lower alkoxy-lower alkoxy, carbamoyl-lower alkyl, carboxy-lower alkoxy, P1-O-A1- (wherein P1 = H, a group constituting a prodrug; A1 = a single bond, lower alkylene or alkyleneoxy); R2 = H, lower alkyl; R3 = lower alkyl, lower alkoxy, lower alkylthio, lower alkenyloxy, aralkyloxy, lower alkoxy-lower alkyl, lower alkoxy-lower alkoxy, lower alkoxy-lower alkylthio, CO2H, lower alkoxycarbonyl, cyano, aralkyloxy-lower alkyl, cyano-lower alkyl, CONH2, carbamoyl-lower alkyl, NH2, mono- or di(lower alkyl)amino, lower alkoxycarbonyl-lower alkyl, carboxy-lower alkoxy, P2-O-A2- (wherein P2 = H, a group constituting a prodrug; A2 - lower alkylene, lower alkyleneoxy, lower alkylenethio, lower alkenylene); some provisos are given] are prepared These compds. are useful as preventives or remedies for diseases caused by hyperglycemia such as diabetes, diabetes complications, obesity, hyperinsulinism, glucose metabolism, hyperlipidemia, hypercholesteremia, hypertriglycemia, abnormal lipid metabolism, atherosclerosis, hypertension, ischemic heart failure, edema, hyperuricemia, and gout because of having an improved oral absorbability and exerting an excellent human SGLT2 activity inhibitory effect (in vivo). Thus, 0.037 mL Et chloroformate was added to a solution of 0.075 g 2-(4-ethylbenzyl)-5-hydroxymethylphenyl β-D-glucopyranoside in 2 mL 2,4,6-trimethylpyridine and stirred at room temperature for 17 h to give 0.020 g 2-(4-ethylbenzyl)-5-hydroxymethylphenyl 6-O-ethoxycarbonyl-β-D-glucopyranoside (II). Oral bioavailability (serum concentration) of II was 43% of that of i.v. administration in SD rats. II increased the excretion of glucose in urine from 7.0 mg/24 h/200 g body weight at 1 mg/kg body weight to 195 mg/24 h/200 g body weight at 10 mg/kg body weight when fed p.o. to SD rats.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 20 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:521754 CAPLUS

DOCUMENT NUMBER: 137:93946

TITLE: Preparation of glucopyranosyloxypyrazole derivatives as inhibitors of human SGLT2 (sodium-dependent glucose-transporter 2) activity and use thereof in medicines

INVENTOR(S): Fujikura, Hideki; Fushimi, Nobuhiko; Nishimura, Toshihiro; Nakabayashi, Takeshi; Isaji, Masayuki

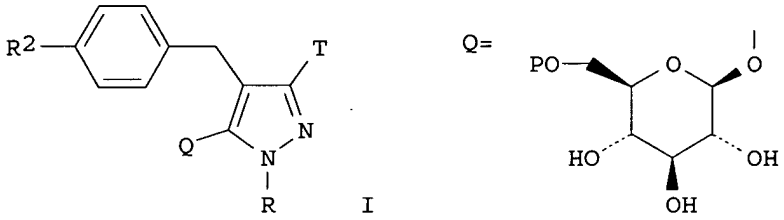
PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 125 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002053573	A1	20020711	WO 2001-JP11348		20011225
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2432145	AA	20020711	CA 2001-2432145		20011225
EP 1354888	A1	20031022	EP 2001-994995		20011225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
BR 2001016607	A	20040420	BR 2001-16607		20011225
CN 1492873	A	20040428	CN 2001-822883		20011225
NZ 526715	A	20050225	NZ 2001-526715		20011225
NO 2003002909	A	20030827	NO 2003-2909		20030624
ZA 2003004905	A	20040624	ZA 2003-4905		20030624
US 2004063646	A1	20040401	US 2003-451926		20031106
PRIORITY APPLN. INFO.:			JP 2000-403534	A	20001228
			WO 2001-JP11348	W	20011225

OTHER SOURCE(S): MARPAT 137:93946
GI



AB Glucopyranosyloxypyrazole derivs. represented by the general formula (I) or pharmacol. acceptable salts thereof [wherein R is hydrogen, lower alkyl, or a prodrug-constituting group; one of Q and T is a group of the general formula Q (wherein P is hydrogen or a prodrug-constituting group), and the other is lower alkyl or halogenated lower alkyl; and R2 is hydrogen, lower alkyl, lower alkoxy, lower alkylthio, halogenated lower alkyl, or halogeno, with the proviso that when R is hydrogen or lower alkyl, P is not hydrogen] are prepared These compds. exhibit human SGLT2 inhibiting activity and are improved in peroral absorbability and useful as preventive or therapeutic drugs for diseases due to hyperglycemia, e.g., diabetes, complications of diabetes, and obesity. Other diseases caused by hyperglycemia include hyperinsulinism, abnormal glucose metabolism, hyperlipidemia, hypercholesteremia, hypertriglycemia, abnormal lipid metabolism, atherosclerosis, hypertension, ischemic heart failure, edema, hyperuricemia, and gout. Thus, to solution of 3-(β-D-glucopyranosyloxy)-4-[(4-isopropoxyphenyl)methyl]-1-isopropyl-5-methylpyrazole in

2,4,6-trimethylpyridine was added Et chloroformate and stirred at room temperature overnight to give 4-[(4-isopropoxyphenyl)methyl]-3-(6-O-methoxycarbonyl-β-D-glucopyranosyloxy)-1-isopropyl-5-methylpyrazole (II). Oral bioavailability of II was 27% of that of i.v. administration in SD rats and II increased the urinary secretion of glucose from 1.7 mg/24 h/200 g body weight at 1 mg/kg to 167.3 mg/24 h/20 g body weight at 10 mg/kg.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 21 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:540258 CAPLUS
DOCUMENT NUMBER: 137:109267
TITLE: Preparation of benzoxepinopyridines as HMG-CoA reductase inhibitors
INVENTOR(S): Robl, Jeffrey A.; Chen, Bang-chi; Sun, Chong-qing
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 42 pp., Cont.-in-part of U.S. Ser. No. 875,155.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002094977	A1	20020718	US 2001-7407		20011204
US 6627636	B2	20030930			
US 2002013334	A1	20020131	US 2001-875155		20010606
PRIORITY APPLN. INFO.:			US 2000-211595P	P	20000615
			US 2001-875155	A2	20010606

OTHER SOURCE(S): MARPAT 137:109267
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [X = O, S, SO, SO2, NR7; Z = HOCHCH2CH(OH)CH2CO2R3, 4-hydroxy-2-oxopyran-6-yl, etc.; n = 0, 1; R1, R2 = alkyl, arylalkyl, cycloalkyl, alkenyl, cycloalkenyl, aryl, heteroaryl, cycloheteroalkyl; R3 = H, alkyl, metal ion; R4 = H, halo, CF3, etc.; R7 = H, alkyl, aryl, alkanoyl, aroyl, alkoxycarbonyl, etc.; R9, R10 = H, alkyl], were prepared as HMG CoA reductase inhibitors active in inhibiting cholesterol biosynthesis, modulating blood serum lipids such as lowering LDL cholesterol and/or increasing HDl cholesterol, and treating hyperlipidemia, hypercholesterolemia, hypertriglyceridemia and atherosclerosis (no data). A multistep synthesis of II is reported.

L12 ANSWER 22 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:392237 CAPLUS
DOCUMENT NUMBER: 136:401651
TITLE: Preparation of fused pyridine derivatives as HMG-CoA reductase inhibitors
INVENTOR(S): Robl, Jeffrey A.; Chen, Bang-Chi; Sun, Chong-Qing
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 46 pp., Cont.-in-part of U.S. Ser. No. 875,218.

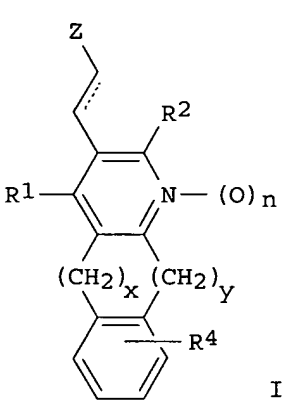
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002061901	A1	20020523	US 2001-8154	20011204
US 6620821	B2	20030916		
US 2002028826	A1	20020307	US 2001-875218	20010606
US 2004024216	A1	20040205	US 2003-602753	20030624

PRIORITY APPLN. INFO.: US 2000-211594P P 20000615
US 2001-875218 A2 20010606
US 2001-8154 A3 20011204

OTHER SOURCE(S): MARPAT 136:401651

GI



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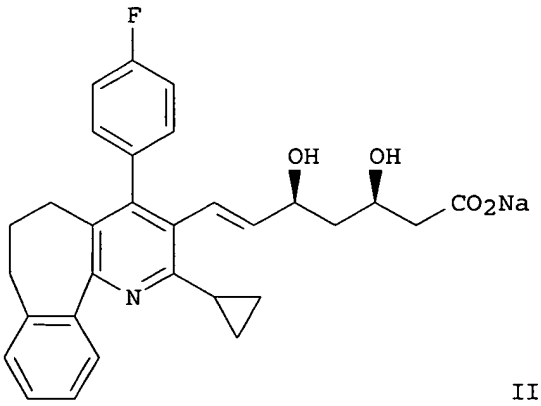


II

AB The title compds. I and their pharmaceutically acceptable salts, esters, prodrug esters, and stereoisomers are claimed [wherein: Z = CH(OH)CH2CR7(OH)CH2CO2R3 or corresponding pyranone lactone derivs.; n = 0, 1; x = 0, 1, 2, 3, or 4; y = 0, 1, 2, 3 or 4, provided that at least one of x and y is other than 0; and optionally one or more carbons of (CH2)x and/or (CH2)y together with addnl. carbons form a 3 to 7 membered spirocyclic ring; R1, R2 = alkyl, arylalkyl, cycloalkyl, alkenyl, cycloalkenyl, aryl, heteroaryl, cycloheteroalkyl; R3 = H or lower alkyl; R4 = H, halo, CF3, OH, alkyl, alkoxy, CO2H, (un)substituted NH2, cyano, (un)substituted CONH2, etc.; R7 = H, alkyl]. The compds. are HMG-CoA reductase inhibitors, and are active in inhibiting cholesterol biosynthesis and modulating blood serum lipids, for example, lowering LDL cholesterol and/or increasing HDL cholesterol (no data). I are thus useful in treating hyperlipidemia and dyslipidemia, in hormone replacement therapy, and in treating hypercholesterolemia, hypertriglyceridemia and atherosclerosis, as well as Alzheimer's disease and osteoporosis. Prepns. of several compds. are described. For instance, a multistep synthesis of fused pyridine derivative II is reported. Compds. I may be used in a manner similar to atorvastatin, pravastatin, simvastatin, etc. Combinations of compds. I with various other drugs are claimed, the latter being specified as certain pharmacol. classes, as inhibitors of specific enzymes, as (ant)agonists of specific receptors, and as numerous named drugs.

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

L12 ANSWER 23 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:828415 CAPLUS
DOCUMENT NUMBER: 137:89412
TITLE: Detection of variations in the DNA methylation profile of genes in the determining the risk of disease
INVENTOR(S): Berlin, Kurt; Piepenbrock, Christian; Olek, Alexander
PATENT ASSIGNEE(S): Epigenomics A.-G., Germany
SOURCE: PCT Int. Appl., 636 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 68
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001077373	A2	20011018	WO 2001-XA1486	20010406
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, CF, CG, CI, CM, GA, GW, ML, MR, NE, SN, TD, TG				
DE 10019058	A1	20011220	DE 2000-10019058	20000406
WO 2001077373	A2	20011018	WO 2001-DE1486	20010406
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001076330	A5	20011023	AU 2001-76330	20010406
EP 1274865	A2	20030115	EP 2001-953936	20010406
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003531589	T2	20031028	JP 2001-575634	20010406
EP 1360319	A2	20031112	EP 2001-955278	20010406
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004067491	A1	20040408	US 2003-240454	20030311
US 2003162194	A1	20030828	US 2003-240452	20030414
JP 2004008217	A2	20040115	JP 2003-160375	20030605
US 2004023279	A1	20040205	US 2003-455212	20030605
PRIORITY APPLN. INFO.:			DE 2000-10019058 A	20000406
			WO 2001-DE1486 W	20010406
			DE 2000-10019173 A	20000407
			DE 2000-10032529 A	20000630
			DE 2000-10043826 A	20000901
			WO 2001-EP3969 W	20010406
			WO 2001-EP4016 W	20010406
			EP 2002-90203 A	20020605

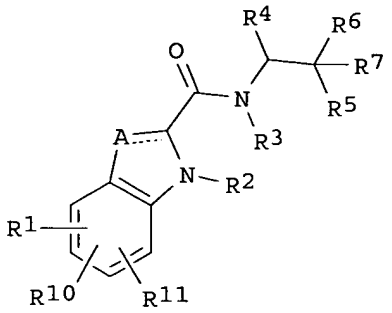
AB The invention relates to an oligonucleotide kit as probe for the detection of relevant variations in the DNA methylation of a target group of genes.

The invention further relates to the use of the same for determining the gene variant with regard to DNA methylation, a medical device, using an oligonucleotide kit, a method for determining the methylation state of an individual and a method for the establishment of a model for establishing the probability of onset of a disease state in an individual. Such diseases may be: undesired pharmaceutical side-effects; cancerous diseases; CNS dysfunctions, injuries or diseases; aggressive symptoms or relational disturbances; clin., psychol. and social consequences of brain injury; psychotic disorders and personality disorders; dementia and/or associated syndromes; cardiovascular disease, dysfunction and damage; dysfunction, damage or disease of the gastrointestinal tract; dysfunction, damage or disease of the respiratory system; injury, inflammation, infection, immunity and/or anastasis; dysfunction, damage or disease of the body as an abnormal development process; dysfunction, damage or disease of the skin, muscle, connective tissue or bones; endocrine and metabolic dysfunction, damage or disease; headaches or sexual dysfunction. This abstract record is one of several records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.

L12 ANSWER 24 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:709687 CAPLUS
DOCUMENT NUMBER: 135:272869
TITLE: Synthesis of indolyl-amides as **glycogen phosphorylase** inhibitors for treatment of type 2 diabetes
INVENTOR(S): Treadway, Judith Lee
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 78 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 1136071	A2	20010926	EP 2001-301979		20010305
EP 1136071	A3	20030326			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
JP 2001302546	A2	20011031	JP 2001-78839		20010319
CA 2341344	AA	20010922	CA 2001-2341344		20010320
ZA 2001002318	A	20020920	ZA 2001-2318		20010320
US 2003004162	A1	20030102	US 2001-813335		20010320
NZ 510677	A	20021025	NZ 2001-510677		20010321
PRIORITY APPLN. INFO.:			US 2000-191381P	P	20000322

OTHER SOURCE(S): MARPAT 135:272869
GI



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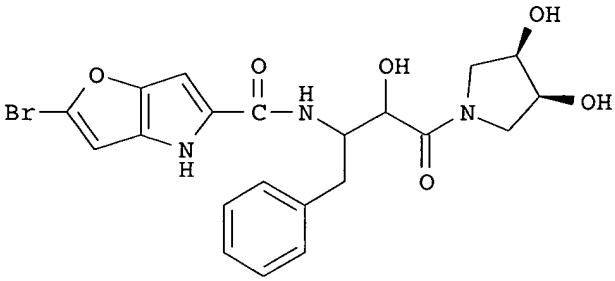

II

AB Title compds. I [A = CH, C-alkyl, C-halo when the dotted line is a bond; A = CH2, CH-alkyl when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6- or 7-NO2, CN, alkyl, alkoxy, (di/tri)fluoromethyl; R2 = H; R3 = H, alkyl; R4 = H, (hydroxy)alkyl, alkoxy-alkyl, phenyl(hydroxy)alkyl, thienyl-alkyl, etc.; R5 = H, OH, F, alkyl, alkoxy, alkanoyl, amino-alkoxy, etc.; R7 = H, F, alkyl; or R5 and R7 can be taken together to be oxo; R6 = carboxy, alkoxycarbonyl, amido, acyl, alkyl, OH, alkoxy; R9 = H, alkyl, OH, alkoxy, methyleneperfluorinated-alkyl, Ph, pyridyl, thienyl, etc.] and derivs. were prepared Over 50 examples were reported. For instance, 2-bromo-4H-furo[3,2-b]pyrrole-5-carboxylic acid was coupled to 2-amino-1-(3,4-dihydroxypyrrolidin-1-yl)-3-phenylpropan-1-one hydrochloride (DCM, DMF, HOBt, EDC, room temperature) to give amide II. Compds. I are **glycogen phosphorylase** inhibitors used for treating type 2 diabetes mellitus in cases which have not yet presented, but in which there is an increased risk of developing such condition. Combination therapies of I and non-**glycogen phosphorylase** inhibiting anti-diabetic agents are also claimed.

L12 ANSWER 25 OF 51 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2001092963 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11147778
TITLE: Effects of tungstate, a new potential oral antidiabetic agent, in Zucker diabetic fatty rats.
AUTHOR: Munoz M C; Barbera A; Dominguez J; Fernandez-Alvarez J; Gomis R; Guinovart J J
CORPORATE SOURCE: Department of Biochemistry and Molecular Biology, Universitat de Barcelona, Spain.
SOURCE: Diabetes, (2001 Jan) 50 (1) 131-8.
Journal code: 0372763. ISSN: 0012-1797.
PUB. COUNTRY: United States

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200101
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010125

AB Tungstate was orally administered to 7.5-week-old male Zucker diabetic fatty (ZDF) rats that already showed moderate hyperglycemia (180 +/- 16 mg/dl). The animals became normoglycemic for approximately 10 days. Then, glycemia started to rise again, although it did not reach the initial values until day 24, when levels stabilized at approximately 200 mg/dl for the duration of the experiment. Untreated ZDF rats showed steadily increased blood glucose levels between 7.5 and 10 weeks of age, when they reached a maximum value of 450 +/- 19 mg/dl, which was maintained throughout the experiment. In addition, tolerance to intraperitoneal glucose load improved in treated diabetic rats. Serum levels of **triglycerides** were elevated in untreated diabetic rats compared with their lean counterparts (ZLC). In the liver of diabetic animals, glucokinase (GK), **glycogen phosphorylase** a (GPa), liver-pyruvate kinase (L-PK), and fatty acid synthase (FAS) activities decreased by 81, 30, 54, and 35%, respectively, whereas phosphoenolpyruvate carboxykinase (PEPCK) levels increased by 240%. Intracellular glucose-6-phosphate (G6P) decreased by 40%, whereas glycogen levels remained unaffected. Tungstate treatment of these rats induced a 42% decrease in serum levels of **triglycerides** and normalized hepatic G6P concentrations, GPa activity, and PEPCK levels. GK activity in treated diabetic rats increased to 50% of the values of untreated ZLC rats. L-PK and FAS activity increased to higher values than those in untreated lean rats (1.7-fold L-PK and 2.4-fold FAS). Hepatic glycogen levels were 55% higher than those in untreated diabetic and healthy rats. Tungstate treatment did not significantly change the phosphotyrosine protein profile of primary cultured hepatocytes from diabetic animals. These data suggest that tungstate administration to ZDF rats causes a considerable reduction of glycemia, mainly through a partial restoration of hepatic glucose metabolism and a decrease in lipotoxicity.

L12 ANSWER 26 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2001:441556 BIOSIS
DOCUMENT NUMBER: PREV200100441556
TITLE: Oral administration of tungstate normalizes hyperglycemia and improves hepatic insulin resistance in ob/ob mice.
AUTHOR(S): Munoz, Maria C. [Reprint author]; Dominguez, Jorge [Reprint author]; Guinovart, Joan J. [Reprint author]
CORPORATE SOURCE: Barcelona, Spain
SOURCE: Diabetes, (June, 2001) Vol. 50, No. Supplement 2, pp. A127. print.
Meeting Info.: 61st Scientific Sessions of the American Diabetes Association. Philadelphia, Pennsylvania, USA. June 22-26, 2001. American Diabetes Association.
CODEN: DIAEAZ. ISSN: 0012-1797.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
Conference; (Meeting Poster)
LANGUAGE: English
ENTRY DATE: Entered STN: 19 Sep 2001
Last Updated on STN: 22 Feb 2002

L12 ANSWER 27 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:863015 CAPLUS
DOCUMENT NUMBER: 134:145672
TITLE: Overexpression of glutamine:fructose-6-phosphate amidotransferase in the liver of transgenic mice results in enhanced glycogen storage, hyperlipidemia, obesity, and impaired glucose tolerance
AUTHOR(S): Veerababu, Geddati; Tang, Jiping; Hoffman, Rosemary T.; Daniels, Marc C.; Hebert, Leon F., Jr.; Crook, Errol D.; Cooksey, Robert C.; McClain, Donald A.
CORPORATE SOURCE: Division of Endocrinology, Department of Medicine, University of Utah School of Medicine, Salt Lake City, UT, 84132, USA
SOURCE: Diabetes (2000), 49(12), 2070-2078
CODEN: DIAEAZ; ISSN: 0012-1797
PUBLISHER: American Diabetes Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To examine the effect of increased hexosamine flux in liver, the rate-limiting enzyme in hexosamine biosynthesis (glutamine:fructose-6-phosphate amidotransferase [GFA]) was overexpressed in transgenic mice using the PEPCK promoter. Liver from random-fed transgenic mice had 1.6-fold higher GFA activity compared with nontransgenic control littermates (276 ± 24 pmol·mg-1·min-1 in transgenic mice vs. 176 ± 18 pmol·mg-1·min-1 in controls, P < 0.05) and higher levels of the hexosamine end product UDP-N-acetyl glucosamine (288 ± 11 pmol/g in transgenic mice vs. 233 ± 10 pmol/g in controls, P < 0.001). Younger transgenic mice compared with control mice had lower fasting serum glucose (4.8 ± 0.5 mmol/l in transgenic mice vs. 6.5 ± 0.8 mmol/l in controls, P < 0.05) without higher insulin levels (48.0 ± 7.8 pmol/l in transgenic mice vs. 56.4 ± 5.4 pmol/l in controls, P = NS); insulin levels were significantly lower in transgenic males (P < 0.05). At 6 mo of age, transgenic animals had normal insulin sensitivity by the hyperinsulinemic clamp technique. Hepatic glycogen content was higher in the transgenic mice (108.6 ± 5.2 μmol/g in transgenic mice vs. 32.8 ± 1.3 μmol/g in controls, P < 0.01), associated with an inappropriate activation of glycogen synthase. Serum levels of free fatty acids (FFAs) and **triglycerides** were also elevated (FFAs, 0.67 ± 0.03 mmol/l in transgenic mice vs. 0.14 ± 0.01 in controls; **triglycerides**, 1.34 ± 0.15 mmol/l in transgenic mice vs. 0.38 ± 0.01 in controls, P < 0.01). Older transgenic mice became heavier than control mice and exhibited relative glucose intolerance and insulin resistance. The glucose disposal rate at 8 mo of age was 154 ± 5 mg·kg-1·min-1 in transgenic mice vs. 191 ± 6 mg·kg-1·min-1 in controls (P < 0.05). We conclude that hexosamines are mediators of glucose sensing for the regulation of hepatic glycogen and lipid metabolism Increased hexosamine flux in the liver signals a shift toward fuel storage, resulting ultimately in obesity and insulin resistance.

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 28 OF 51 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2001223725 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10998363
TITLE: Stimulation of hormone-sensitive lipase activity by contractions in rat skeletal muscle.
AUTHOR: Langfort J; Ploug T; Ihlemann J; Holm C; Galbo H
CORPORATE SOURCE: Department of Applied Physiology, The Polish Academy of Sciences, Warsaw, Poland.
SOURCE: Biochemical journal, (2000 Oct 1) 351 (Pt 1) 207-14.

Journal code: 2984726R. ISSN: 0264-6021.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200104
ENTRY DATE: Entered STN: 20010502
Last Updated on STN: 20010502
Entered Medline: 20010426

AB Because the enzymic regulation of muscle **triglyceride** breakdown is poorly understood we studied whether neutral lipase in skeletal muscle is activated by contractions. Incubated soleus muscles from 70 g rats were electrically stimulated for 60 min. Neutral lipase activity against triacylglycerol increased after 1 and 5 min of contractions [0.36 +/- 0.02 (basal) versus 0.49 +/- 0.05 (1 min) and 0.54 +/- 0.05 (5 min) m-unit.mg of protein(-1), means +/- S.E.M., $P < 0.05$]. After 10 min the neutral lipase activity (0.40 +/- 0.05 m-unit.mg of protein(-1)) had decreased to basal values ($P > 0.05$). The contraction-mediated increase in lipase activity was increased by approximately 110% when muscle was stimulated in the presence of okadaic acid. Conversely, treatment of muscle homogenate with alkaline phosphatase completely reversed the contraction-mediated lipase activation. Lipase activity did not change during contractions when analysed in the presence of anti-hormone-sensitive-lipase (HSL) antibody [0.17 +/- 0.02 (basal) versus 0.21 +/- 0.02 (5 min) m-unit.mg of protein(-1), $P > 0.05$]. Furthermore, immunoprecipitation with affinity-purified anti-HSL antibody reduced muscle-HSL protein concentration by 81+/-4% and caused similar reductions in lipase activity against triacylglycerol and in the contraction-induced increase in this activity. Neither prior sympathectomy [0.33+/- 0.02 (basal) versus 0.53 +/- 0.06 (5 min) m-unit.mg of protein(-1), $P < 0.05$] nor propranolol impaired the lipase response to contractions. **Glycogen phosphorylase** activity in the absence of AMP increased after 1 min [27.3 +/- 3.1 versus 8.9 +/- 1.8% (activity without AMP/total activity with AMP), $P < 0.05$] and returned to basal levels after 5 min. In conclusion, skeletal-muscle-immunoreactive HSL is transiently stimulated by contractions and the mechanism probably involves phosphorylation. The time course of HSL activation is similar to that of **glycogen phosphorylase.** Apparently, the two enzymes are regulated in parallel by contraction-induced as well as hormonal mechanisms, allowing simultaneous recruitment of all major extra- and intra-muscular energy stores.

L12 ANSWER 29 OF 51 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 2000418551 EMBASE
TITLE: Improved energy homeostasis of the heart in the metabolic state of exercise.
AUTHOR: Goodwin G.W.; Taegtmeyer H.
CORPORATE SOURCE: H. Taegtmeyer, Univ. of Texas-Houston Med. School, 6431 Fannin, Houston, TX 77030, United States. Taegtmeyer@uth.tmc.edu
SOURCE: American Journal of Physiology - Heart and Circulatory Physiology, (2000) Vol. 279, No. 4 48-4, pp. H1490-H1501. Refs: 40
ISSN: 0363-6135 CODEN: AJPPDI
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 002 Physiology
LANGUAGE: English
SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 20001214
Last Updated on STN: 20001214

AB We postulate that metabolic conditions that develop systemically during exercise (high blood lactate and high nonesterified fatty acids) are favorable for energy homeostasis of the heart during contractile stimulation. We used working rat hearts perfused at physiological workload and levels of the major energy substrates and compared the metabolic and contractile responses to an acute low-to-high work transition under resting versus exercising systemic metabolic conditions (low vs. high lactate and nonesterified fatty acids in the perfusate). Glycogen preservation, resulting from better maintenance of high-energy phosphates, was a consequence of improved energy homeostasis with high fat and lactate. We explained the result by tighter coupling between workload and total β-oxidation. Total fatty acid oxidation with high fat and lactate reflected increased availability of exogenous and endogenous fats for respiration, as evidenced by increased long-chain fatty acyl-CoA esters (LCFA-CoAs) and by an increased contribution of **triglycerides** to total β-oxidation. **Triglyceride** turnover (synthesis and degradation) also appeared to increase. Elevated LCFA-CoAs caused high total β-oxidation despite increased malonyl-CoA. The resulting bottleneck at mitochondrial uptake of LCFA-CoAs stimulated **triglyceride** synthesis. Our results suggest the following. First, both malonyl-CoA and LCFA-CoAs determine total fatty acid oxidation in heart. Second, concomitant stimulation of peripheral glycolysis and lipolysis should improve cardiac energy homeostasis during exercise. We speculate that high lactate contributes to the salutary effect by bypassing the glycolytic block imposed by fatty acids, acting as an anaplerotic substrate necessary for high tricarbocylic acid cycle flux from fatty acid-derived acetyl-CoA.

L12 ANSWER 30 OF 51 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 1998454613 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9781328
TITLE: Hormone-sensitive lipase (HSL) expression and regulation in skeletal muscle.
AUTHOR: Langfort J; Ploug T; Ihlemann J; Enevoldsen L H; Stallknecht B; Saldo M; Kjaer M; Holm C; Galbo H
CORPORATE SOURCE: Copenhagen Muscle Research Centre, National University Hospital, Denmark.
SOURCE: Advances in experimental medicine and biology, (1998) 441 219-28. Ref: 23
Journal code: 0121103. ISSN: 0065-2598.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Space Life Sciences
ENTRY MONTH: 199812
ENTRY DATE: Entered STN: 19990115
Last Updated on STN: 19990115
Entered Medline: 19981201

AB Because the enzymatic regulation of muscle **triglyceride** metabolism is poorly understood we explored the character and activation of neutral lipase in muscle. Western blotting of isolated rat muscle fibers demonstrated expression of hormone-sensitive lipase (HSL). In incubated soleus muscle epinephrine increased neutral lipase activity by beta-adrenergic mechanisms involving cyclic AMP-dependent protein kinase (PKA). The increase was paralleled by an increase in **glycogen phosphorylase** activity and could be abolished by antiserum against

HSL. Electrical stimulation caused a transient increase in activity of both neutral lipase and **glycogen phosphorylase.** The increase in lipase activity during contractions was not influenced by sympathectomy or propranolol. Training diminished the epinephrine induced lipase activation in muscle but enhanced the activation as well as the overall concentration of lipase in adipose tissue. In agreement with the in vitro findings, in adrenalectomized patients an increase in muscle neutral lipase activity was found at the end of prolonged exercise only if epinephrine was infused. In accordance with feedforward regulation of substrate mobilization in exercise, our studies have shown that HSL is present in skeletal muscle cells and is stimulated in parallel with **glycogen phosphorylase** by both epinephrine and contractions. HSL adapts differently to training in muscle compared with adipose tissue.

L12 ANSWER 31 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:455870 CAPLUS
DOCUMENT NUMBER: 127:106850
TITLE: The influence of changes in food availability on the activities of key degradative and metabolic enzymes in the liver and epitaxial muscle of the golden perch
AUTHOR(S): Collins, A. L.; Anderson, T. A.
CORPORATE SOURCE: Department of Zoology, James Cook University of North Queensland, Townsville, 4814, Australia
SOURCE: Journal of Fish Biology (1997), 50(6), 1158-1165
CODEN: JFIBA9; ISSN: 0022-1112
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This study investigated the influence of feeding frequency on the activities of important degradative enzymes and potentially rate-limiting enzymes in glycolysis and gluconeogenesis in the liver and white epitaxial muscle of Macquaria ambigua. Adult animals were either fed daily to satiety (fed), deprived of food for up to 180 days (starved), or starved for 150 days then fed daily to satiety for 30 days (starved/fed). The activities of lipolytic, glycogenolytic and glycolytic enzymes in the livers of starved fish were maintained as long as liver energy stores were available, but became significantly reduced following their exhaustion indicating a decline in metabolism in response to prolonged starvation. The response of epitaxial muscle metabolism to changes in food availability was different to that of the liver, as no significant change in the activities of muscle lipolytic or glycogenolytic enzymes were observed in response to starvation. Muscle tissue metabolism was reduced after 60-90 days of starvation, but then returned to prestarvation levels.
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 32 OF 51 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 96365630 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8769807
TITLE: Botulinum-induced muscle paralysis alters metabolic gene expression and fatigue recovery.
AUTHOR: Gorin F; Herrick K; Froman B; Palmer W; Tait R; Carlsen R
CORPORATE SOURCE: Department of Neurology, School of Medicine, University of California, Davis 95616, USA.. fagarin@ucdavis.edu
CONTRACT NUMBER: HL-07082 (NHLBI)
SOURCE: American journal of physiology, (1996 Jan) 270 (1 Pt 2) R238-45.
Journal code: 0370511. ISSN: 0002-9513.
PUB. COUNTRY: United States

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199612
ENTRY DATE: Entered STN: 19970128
Last Updated on STN: 19980206
Entered Medline: 19961220

AB We evaluated the physiological, histochemical, and biochemical consequences of inhibiting contractile activity in rat skeletal muscles with botulinum toxin A (BTX). Contractile activity was entirely eliminated 12-18 h after a single, focal, intramuscular injection of BTX into the rat tibialis anterior muscle (TA). Neuromuscular transmission remained completely inhibited for 10-12 days, then slowly recovered. BTX-treated muscles exhibited a lower resistance to both high- and low-frequency fatigue at 7 and 14 days after injection, but contractile force recovered more rapidly in treated TA after fatigue. Treated TA showed a twofold increase in the activity of the **triglyceride** hydrolase enzyme lipoprotein lipase (LPL) and a comparable increase in the relative abundance of LPL steady-state mRNA. In contrast, there was a 28% reduction in protein levels of the muscle isozyme of **glycogen phosphorylase** (MGP) and a 70% decrease in relative MGP transcript levels. Similar changes in relative transcript levels of LPL and MGP were observed in the predominantly fast-twitch extensor digitorum longus after BTX injection, but relative LPL and MGP mRNA levels were not altered in predominantly slow-twitch soleus. Histochemical evidence indicated that fast-twitch glycolytic fibers had increased lipid content. These biochemical alterations were reversed 120 days after BTX treatment despite persistent atrophy.

L12 ANSWER 33 OF 51 EMBASE
on STN
ACCESSION NUMBER: 96060096 EMBASE
DOCUMENT NUMBER: 1996060096
TITLE: Botulinum-induced muscle paralysis alters metabolic gene expression and fatigue recovery.
AUTHOR: Gorin F.; Herrick K.; Froman B.; Palmer W.; Tait R.; Carlsen R.
CORPORATE SOURCE: Dept. of Neurology, UC Davis School of Medicine, 1515 Newton Ct.,Davis, CA 95616, United States
SOURCE: American Journal of Physiology - Regulatory Integrative and Comparative Physiology, (1996) Vol. 270, No. 1 39-1, pp. R238-R245.
ISSN: 0363-6119 CODEN: AJPRDO
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 002 Physiology
005 General Pathology and Pathological Anatomy
008 Neurology and Neurosurgery
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 960312
Last Updated on STN: 960312

AB We evaluated the physiological, histochemical, and biochemical consequences of inhibiting contractile activity in rat skeletal muscles with botulinum toxin A (BTX). Contractile activity was entirely eliminated 12-18 h after a single, focal, intramuscular injection of BTX into the rat tibialis anterior muscle (TA). Neuromuscular transmission remained completely inhibited for 10-12 days, then slowly recovered. BTX-treated muscles exhibited a lower resistance to both high- and

low-frequency fatigue at 7 and 14 days after injection, but contractile force recovered more rapidly in treated TA after fatigue. Treated TA showed a twofold increase in the activity of the **triglyceride** hydrolase enzyme lipoprotein lipase (LPL) and a comparable increase in the relative abundance of LPL steady-state mRNA. In contrast, there was a 28% reduction in protein levels of the muscle isozyme of **glycogen phosphorylase** (MGP) and a 70% decrease in relative MGP transcript levels. Similar changes in relative transcript levels of LPL and MGP were observed in the predominantly fast-twitch extensor digitorum longus after BTX injection, but relative LPL and MGP mRNA levels were not altered in predominantly slow-twitch soleus. Histochemical evidence indicated that fast- twitch glycolytic fibers had increased lipid content. These biochemical alterations were reversed 120 days after BTX treatment despite persistent atrophy.

L12 ANSWER 34 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 5

ACCESSION NUMBER: 1996:62597 BIOSIS
DOCUMENT NUMBER: PREV199698634732
TITLE: Glycerol synthesis in the rainbow smelt Osmerus mordax.
AUTHOR(S): Raymond, James A.
CORPORATE SOURCE: Dep. Biol. Sci. Univ. Nevada, Las Vegas, La Vegas, NV 89154, USA
SOURCE: Journal of Experimental Biology, (1995) Vol. 198, No. 12, pp. 2569-2573.
CODEN: JEBIAM. ISSN: 0022-0949.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Feb 1996
Last Updated on STN: 10 Feb 1996

AB Rainbow smelt, Osmerus mordax, maintain high glycerol levels in winter to avoid freezing. After intramuscular injection of 14C-labeled glucose, (14C)glycerol was found in the blood, liver and muscle, indicating that glycogen is a source of glycerol. Levels of both the active and inactive forms of **glycogen phosphorylase** were higher in muscle in winter than in autumn, although the fraction in the active form did not change significantly. More of the phosphorylase was in the active form in the liver than in the muscle. Short-term starvation resulted in a significant decrease in the level of glycogen soon after the stomachs were emptied, presumably to replace glycerol lost to the water. However, tissue glycerol levels remained relatively high, despite a near depletion of glycogen reserves. **Triglyceride** levels increased slightly during starvation, indicating that **triglycerides** were not involved in glycerol synthesis. After intramuscular injection of 14C-labeled pyruvate, (14C)glycerol was found in the blood, liver and muscle, indicating a second route, presumably from muscle protein, to glycerol synthesis. Liver phosphoenolpyruvate carboxykinase activity was slightly higher in winter, possibly to assist in the conversion of pyruvate to glycerol.

L12 ANSWER 35 OF 51 MEDLINE on STN DUPLICATE 6

ACCESSION NUMBER: 96079154 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8581074
TITLE: Liver disturbances in obesity and diabetes mellitus.
AUTHOR: Van Steenbergen W; Lanckmans S
CORPORATE SOURCE: Department of Internal Medicine, University Hospital Gasthuisberg, Leuven, Belgium.
SOURCE: International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity, (1995 Sep) 19 Suppl 3 S27-36. Ref:

80
Journal code: 9313169. ISSN: 0307-0565.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199603
ENTRY DATE: Entered STN: 19960327
Last Updated on STN: 19960327
Entered Medline: 19960321

AB Abnormal liver tests, right upper quadrant pain and hepatomegaly occurring in an obese or in a diabetic patient may point to the presence of fat or of glycogen accumulation in the liver parenchymal cells. Marked hepatomegaly due to cytoplasmic glycogen deposition is mainly found in poorly controlled insulin-dependent diabetic patients. If accompanied by cushingoid features, growth retardation and by delayed puberty, a diagnosis of Mauriac syndrome can be made. Hyperglycaemia, insulin administration and increased concentrations of the counterregulatory hormone cortisol may all play a role in the glycogen deposition by their concerted actions on the **glycogen phosphorylase** and synthase enzymes, promoting the accumulation of glycogen. Hypercortisolism may be responsible for growth retardation and delayed puberty in Mauriac patients. Regression of hepatomegaly and of the associated clinical characteristics may be obtained by a better metabolic control due to the administration of long-acting insulin and the change from single to twice daily injections. Fatty liver is rare in insulin-dependent diabetic patients and is indicative of a poor diabetic control. This process is quickly reversible by adequate insulin treatment. Steatosis is frequently found in maturity-onset diabetics and in obese patients. The pathogenetic mechanisms leading to the accumulation of **triglycerides** and of fatty acids in the hepatocytes can easily be understood from the normal cycling of fatty acids between the adiopose tissue and the liver. Histologic features of nonalcoholic steatohepatitis can also be found in obese and in diabetic patients. Steatohepatitis may rarely evolve into cirrhosis. In general, there is no correlation between the degree of the biochemical alterations and the severity of the histological findings.(ABSTRACT TRUNCATED AT 250 WORDS)

ACCESSION NUMBER: 95267573 EMBASE
DOCUMENT NUMBER: 1995267573
TITLE: Liver disturbances in obesity and diabetes mellitus.
AUTHOR: Van Steenbergen W.; Lanckmans S.
CORPORATE SOURCE: Department of Internal Medicine, University Hospital Gasthuisberg,3000 Leuven, Belgium
SOURCE: International Journal of Obesity, (1995) Vol. 19, No. SUPPL. 3, pp. S27-S36.
ISSN: 0307-0565 CODEN: IJOBDP
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 003 Endocrinology
029 Clinical Biochemistry
037 Drug Literature Index
048 Gastroenterology
LANGUAGE: English
SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 950926
Last Updated on STN: 950926

AB Abnormal liver tests, right upper quadrant pain and hepatomegaly occuring in an obese or in a diabetic patient may point to the presence of fat or of glycogen accumulation in the liver parenchymal cells. Marked hepatomegaly due to cytoplasmic glycogen deposition is mainly found in poorly controlled insulin-dependent diabetic patients. If accompanied by cushingoid features, growth retardation and by delayed puberty, a diagnosis of Mauriac syndrome can be made. Hyperglycaemia, insulin administration and increased concentrations of the counterregulatory hormone cortisol may all play a role in the glycogen deposition by their concerted actions on the **glycogen phosphorylase** and synthase enzymes, promoting the accumulation of glycogen. Hypercortisolism may be responsible for growth retardation and delayed puberty in Mauriac patients. Regression of hepatomegaly and of the associated clinical characteristics may be obtained by a better metabolic control due to the administration of long-acting insulin and the change from single to twice daily injections. Fatty liver is rare in insulin-dependent diabetic patients and is indicative of a poor diabetic control, This process is quickly reversible by adequate insulin treatment. Steatosis is frequently found in maturity-onset diabetics and in obese patients. The pathogenetic mechanisms leading to the accumulation of **triglycerides** and of fatty acids in the hepatocytes can easily be understood from the normal cycling of fatty acids between the adipose tissue and the liver. Histologic features of nonalcoholic steatohepatitis can also be found in obese and in diabetic patients. Steatohepatitis may rarely evolve into cirrhosis. In general, there is no correlation between the degree of the biochemical alterations and the severity of the histological findings. Treatment of fatty liver and of nonalcoholic steatonecrosis mainly consists of weight loss by adequate dietary measures.

L12 ANSWER 37 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:442198 CAPLUS
DOCUMENT NUMBER: 117:42198
TITLE: Effect of galactosamine on hepatic carbohydrate metabolism: protective role of fructose 1,6-bisphosphate
AUTHOR(S): De Oliveira, Jarbas R.; Rosa, Jose Luis; Ambrosio, Santiago; Bartrons, Ramon
CORPORATE SOURCE: Fac. Odontol., Zona Univ. Bellvitge, L'Hospitalet, 08907, Spain
SOURCE: Hepatology (Philadelphia, PA, United States) (1992), 15(6), 1147-53
CODEN: HPTLD9; ISSN: 0270-9139
DOCUMENT TYPE: Journal
LANGUAGE: English

AB I.p. administration of galactosamine (400 mg/kg) to rats results in reversible liver cell injury that is related to a dose-dependent depletion of uridine phosphates by formation of UDP-sugar derivs. This damage was monitored through changes in serum enzymic activities that increased after the first 6 h of drug administration. Glycemia and serum albumin remained stable during liver injury, whereas cholesterol and **triglycerides** decreased. Glycogen dropped during the first h, remaining low for up to 48 h. Fructose 2,6-bisphosphate and ATP levels decreased even faster than glycogen, with lactate following a similar diminution and being restored in parallel with both metabolites. The reduction in fructose 2,6-bisphosphate can be explained by changes in the substrates or modulators of the 6-phosphofructo-2-kinase/fructose 2,6-bisphosphatase, because neither the cAMP levels nor the activity ratio of the enzyme were modified.

Simultaneous administration of galactosamine and fructose 1,6-bisphosphate (2 g/kg) prevented liver cell death, as monitored by serum enzyme activities. Furthermore, the bisphosphorylated metabolite had protective effects on the changes in liver calcium content and ATP and fructose 2,6-bisphosphate concns. In contrast, fructose, fructose-1-phosphate and fructose-6-phosphate had no significant protection. Fructose 1,6-bisphosphate might decrease galactosamine toxicity by increasing fructose 2,6-bisphosphate and ATP levels, the changes in both metabolites probably being related. The significance of these findings with respect to the mechanism of galactosamine-induced liver injury is also discussed.

L12 ANSWER 38 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1991:260852 BIOSIS
DOCUMENT NUMBER: PREV199140123732; BR40:123732
TITLE: EFFECT OF ISCHEMIA AND REPERFUSION ON LIPID METABOLISM AND GLYCOGENOLYSIS IN HEARTS FROM NORMAL AND DIABETIC RATS.
AUTHOR(S): GRIFFITHS E J [Reprint author]; LLOYD A J; BRUNT R V
CORPORATE SOURCE: DEP BIOCHEM, UNIV BATH, BATH BA2 7AY, UK
SOURCE: (1991) pp. 441-450. NAGANO, M. AND N. S. DHALLA (ED.). THE DIABETIC HEART; INTERNATIONAL SYMPOSIUM, TOKYO, JAPAN, OCTOBER 1989. XXV+533P. RAVEN PRESS: NEW YORK, NEW YORK, USA. ILLUS.
ISBN: 0-88167-743-4.
DOCUMENT TYPE: Book
Conference; (Meeting)
FILE SEGMENT: BR
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 5 Jun 1991
Last Updated on STN: 16 Jul 1991

L12 ANSWER 39 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 7

ACCESSION NUMBER: 1992:3212 BIOSIS
DOCUMENT NUMBER: PREV199293003212; BA93:3212
TITLE: INFLUENCE OF ORAL ADMINISTRATION OF 3 5 3' TRIIODO-L-THYRONINE ON GROWTH DIGESTION FOOD CONVERSION AND METABOLISM IN THE UNDERYEARLING RED SEA BREAM CHRYSOPHRYS-MAJOR TEMMINCK AND SCHLEGEL.
AUTHOR(S): WOO N Y S [Reprint author]; CHUNG A S B; NG T B
CORPORATE SOURCE: DEP BIOL CHINESE UNIV HONG KONG, SHATIN, N T, HONG KONG, CHINA
SOURCE: Journal of Fish Biology, (1991) Vol. 39, No. 4, pp. 459-468.
CODEN: JFIBA9. ISSN: 0022-1112.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 10 Dec 1991
Last Updated on STN: 6 Mar 1992

AB The effect of inclusion of 3,5,3'-triiodo-L-thyronine (T3) in the diet was examined in underyearling red sea bream Chrysophrys major (Temminck and Schlegel). The treatment brought about increases in growth rate, appetite, food conversion efficiency and activities of intestinal enzymes including leucine nitroanilidase, alkaline phosphatase, γ-glutamyltransferase, α-amylase and disaccharidase. There were no changes in the muscle content of water, protein, lipid and glycogen. Liver glycogen content was elevated, as well as activities of the hepatic enzymes **glycogen phosphorylase**, glycogen synthetase, glutamate-pyruvate transaminase, fructose-1,6-diphosphate and

glucose-6-phosphatase. The serum concentrations of total protein, albumin, globulin, α-amino acids, glucose, ammonia and calcium were increased by the treatment whereas the serum concentrations of free fatty acids, cholesterol and **triglyceride** remained unaltered. The results suggest that in the red sea bream T3 stimulated protein and carbohydrate but not lipid metabolism and that the hormone promoted growth by improving appetite, digestion and absorption.

L12 ANSWER 40 OF 51 MEDLINE on STN DUPLICATE 8
ACCESSION NUMBER: 90047198 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2682700
TITLE: Mechanisms of hypoglycemic activity of ganoderan B: a glycan of Ganoderma lucidum fruit bodies.
AUTHOR: Hikino H; Ishiyama M; Suzuki Y; Konno C
SOURCE: Planta medica, (1989 Oct) 55 (5) 423-8.
Journal code: 0066751. ISSN: 0032-0943.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198911
ENTRY DATE: Entered STN: 19900328
Last Updated on STN: 19900328
Entered Medline: 19891127

AB Ganoderan B increased the plasma insulin level in normal and glucose-loaded mice but elicited no effect on insulin binding to isolated adipocytes. Administration of ganoderan B elicited significant increases of the activities of hepatic glucokinase, phosphofructokinase and glucose-6-phosphate dehydrogenase, decreased the hepatic glucose-6-phosphate and glycogen synthetase activities and did not affect the activities of hexokinase and **glycogen phosphorylase** . Ganoderan B reduced the glycogen content in the liver but had no influence on total cholesterol and **triglyceride** levels in the plasma and liver.

L12 ANSWER 41 OF 51 MEDLINE on STN DUPLICATE 9
ACCESSION NUMBER: 87279993 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3112134
TITLE: Effect of insulin on the glucose utilization in isolated cardiac myocytes from adult rat.
AUTHOR: Saeki Y; Kashiwagi A; Uehara N
SOURCE: Journal of biochemistry, (1987 Apr) 101 (4) 977-85.
Journal code: 0376600. ISSN: 0021-924X.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198709
ENTRY DATE: Entered STN: 19900305
Last Updated on STN: 19980206
Entered Medline: 19870924

AB The acute effects of insulin on glucose utilization in isolated rat quiescent cardiac myocytes were studied. Insulin (80 nM) increased the rate of glucose clearance by 2-3 times in the presence of glucose ranging from 0.3 microM to 5.5 mM. Glucose transport, which was measured in terms of both D-glucose uptake in the presence of 0.3 microM D-glucose and initial rate of uptake of 3-O-methylglucose, was stimulated 3-fold in the presence of insulin. At higher glucose concentrations (greater than 100 microM), a decrease in glucose clearance rate due to a shift of the rate-limiting step from glucose transport to a post-transport step in the

pathway of glucose metabolism was observed. At the physiological concentration of glucose (5.5 mM), about 73% of glucose was metabolized into lactate, about 10% was oxidized into CO2 and the rest (17%) remained inside the cells. The pentose phosphate pathway did not contribute to the glucose metabolism in these cells. Insulin (80 nM) significantly increased the uptake of glucose (112%), and the conversions of glucose into lactate (16%), glycogen (64%), and **triglyceride** (18%), but not into CO2 (3%). Insulin transiently increased the percentage of I-form of glycogen synthase by 16% above basal, but did not affect the percentage of a-form of **glycogen phosphorylase.** The content of glucose 6-phosphate in the cells was increased by 46% above the basal value in the presence of insulin. These results indicate that insulin has different acute stimulatory effects on various steps in the metabolic pathway of glucose in isolated quiescent cardiac myocytes.(ABSTRACT TRUNCATED AT 250 WORDS)

L12 ANSWER 42 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1988:81908 BIOSIS
DOCUMENT NUMBER: PREV198834038427; BR34:38427
TITLE: HISTOCHEMICAL AND IMMUNOCYTOCHEMICAL STUDIES ON THE SELECTIVE HEPATOCELLULAR DAMAGE CAUSED BY ALLYL ALCOHOL AND THIOACETAMIDE.
AUTHOR(S): LAWRENCE G M [Reprint author]; BEESLEY A C H; JEPSON M A; MATTHEWS J B
CORPORATE SOURCE: SCH LIFE SCI, LEICESTER POLYTECHNIC, LEICESTER LE7 9SU, UK
SOURCE: Biochemical Society Transactions, (1987) Vol. 15, No. 4, pp. 673-674.
Meeting Info.: 621ST MEETING OF THE BIOCHEMICAL SOCIETY, LONDON, ENGLAND, UK, DECEMBER 17-19, 1986. BIOCHEM SOC TRANS.
CODEN: BCSTB5. ISSN: 0300-5127.
DOCUMENT TYPE: Conference; (Meeting)
FILE SEGMENT: BR
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 2 Feb 1988
Last Updated on STN: 2 Feb 1988

L12 ANSWER 43 OF 51 MEDLINE on STN DUPLICATE 10

ACCESSION NUMBER: 87185015 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3105560
TITLE: Effects of oxytetracycline treatment on enzymes of hepatic glycogen metabolism in genetically diabetic (db/db) mice.
AUTHOR: Benzo C A
CONTRACT NUMBER: RR05402 (NCRR)
SOURCE: Biochemical medicine and metabolic biology, (1987 Feb) 37 (1) 42-50.
Journal code: 8605718. ISSN: 0885-4505.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198705
ENTRY DATE: Entered STN: 19900303
Last Updated on STN: 19980206
Entered Medline: 19870528

AB The effects of daily oxytetracycline treatment on the activities of hepatic glycogen synthase, **glycogen phosphorylase,** plasma glucose, and insulin, and on liver glycogen, free fatty acid, and **triglyceride** levels were examined in 8- to 15-week-old genetically

diabetic and lean mice. Oxytetracycline administration resulted in substantial reductions in the plasma glucose and immunoreactive-insulin levels in both diabetic and lean mice. The drug had no significant effect on the liver glycogen content in either phenotype, regardless of age, but it increased hepatic lipids and depressed body weights in lean animals. The most prominent effect of the drug was in markedly altering the activities of both glycogen synthase and phosphorylase in the liver of older diabetic mice. Oxytetracycline treatment produced a three-fold increase in the percentage of glycogen synthase I activity and reduced by one-third the percentage of **glycogen phosphorylase** a activity in 15-week-old diabetic mice. In age-matched lean mice treated with oxytetracycline, the percentage of glycogen synthase I activity increased significantly, but the percentage of phosphorylase a activity was unchanged. These data suggest that the drug may alter an aspect of hepatic glycogen metabolism which might lead to an inhibition of glycogenolysis and subsequent diminution of blood sugar levels in the diabetic. The present results show that, while oxytetracycline may be effective in reducing the severity of some of the diabetic symptoms associated with carbohydrate metabolism in this animal model of maturity-onset diabetes, the drug may have adverse effects on aspects of protein and lipid metabolism in these animals.

L12 ANSWER 44 OF 51 EMBASE
on STN

ACCESSION NUMBER: 87181574 EMBASE
DOCUMENT NUMBER: 1987181574
TITLE: Synthesis, storage and degradation of myocardial **triglycerides.**
AUTHOR: Stam H.; Schoonderwoerd K.; Hulsmann W.C.
CORPORATE SOURCE: Department of Biochemistry I, Medical Faculty, Erasmus University Rotterdam, 3000 DR Rotterdam, Netherlands
SOURCE: Basic Research in Cardiology, (1987) Vol. 82, No. SUPPL. 1, pp. 19-28.
CODEN: BRCAB7
COUNTRY: Germany
DOCUMENT TYPE: Journal
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
029 Clinical Biochemistry
LANGUAGE: English
ENTRY DATE: Entered STN: 911211
Last Updated on STN: 911211

AB In the mammalian myocardium. an active **triglyceride** synthesis pathway is operating, (re)esterifying activated fatty acids from endogenous or exogenous sources, with the glycolytically derived three-carbon intermediates dihydroxyacetone-phosphate and glycerol-3-phosphate by the so-called Kennedy pathway. The seven enzymes of **triglyceride** synthesis are membrane bound and located at the sarcoplasmic reticulum. The first enzyme in the glycerol-3-phosphate pathway, glycerol-3-phosphate acyltransferase, is proposed to be rate limiting for **triglyceride** formation. This microsomal enzyme is regulated by phosphorylation (inactiyaction)-dephosphorylation (activation) coupled to the β-receptor - adenyl cyclase - protein kinase system. Additional regulatory steps in **triglyceride** formation are the reactions catalyzed by the microsomal phosphatidic acid phosphatase and diglyceride acyltransferase. Intracellular **triglycerides** occur as free floating cytosolic droplets, membrane-bound particles and lipid-filled lysosomes. No consensus exists about the metabolically active portion of myocardial **triglycerides** . Various lipases have been proposed to be involved in endogenous lipolysis: the lysosomal acid, microsomal and soluble neutral

triglyceride, intracellular lipoprotein lipases and the microsomal di- and monoglyceridase. It has been acknowledged that the bulk of the intracellular neutral lipase represents the precursor of vascular lipoprotein lipase. The presence of a neutral lipase, as distinct from lipoprotein lipase, in the rat heart was recently advocated. Endogenous lipolysis is a hormone-sensitive process. Hormone-sensitivity may involve direct alteration of enzyme activity by protein phosporylation-dephosphorylation but is also dependent on the removal rate of product fatty acids, since feedback inhibition is a common property of all lipases in the heart. The rate of endogenous glycogenolysis, determined by phosphorylation-dephosphorylation of **glycogen phosphorylase**, by inducing an increased supply of three-carbon intermediates may dictate the actual lipase activity. The close coupling between the rate of lipolysis, glycogenolysis and **triglyceride** synthesis prevents intracellular accumulation of potentially harmful fatty acids and their CoA and carnitine derivatives.

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ACCESSION NUMBER: 86124818 EMBASE
DOCUMENT NUMBER: 1986124818
TITLE: Placental glycogen accumulation and maternal-fetal metabolic responses in hyperglycaemic non-diabetic rats.
AUTHOR: Barash V.; Gimmon Z.; Shafrir E.
CORPORATE SOURCE: Department of Biochemistry, Hadassah University Hospital, P.O.B. 12000, Jerusalem 91120, Israel
SOURCE: Diabetes Research, (1986) Vol. 3, No. 2, pp. 97-101. CODEN: DIREEM
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal
FILE SEGMENT: 003 Endocrinology
010 Obstetrics and Gynecology
LANGUAGE: English
ENTRY DATE: Entered STN: 911210
Last Updated on STN: 911210

AB The effect of maternal hyperglycaemia on glycogen and **triglyceride** accumulation in the feto-placental unit of non-diabetic rats was studied. Hyperglycaemia was induced by continuous infusion of a 400 g/l glucose solution at the rate of 2.4 g/hr/kg, from day 18.5-20.5 of gestation. Hyperglycaemic mothers were hyperinsulinaemic; their fetuses were hyperglycaemic but their insulin levels were comparable with those of control pregnant rats (infused with a 50 g/l glucose solution at the same rate). Fetal pancreas insulin content in the hyperglycaemic fetuses was pronouncedly reduced. The hyperglycaemia produced an approximately 2-fold increase in placental glycogen content in association with increased activities of placental glycogen synthase and phosphorylase. Maternal serum **triglycerides** fell concomitant with the hyperglycaemia. Placental **triglyceride** content of hyperglycaemic rats did not change significantly, whereas up to a 2-fold increase in maternal and fetal liver **triglyceride** concentration was observed. There was no change in fetal and placental weight. Since we have shown previously an increase in both placental glycogen and **triglycerides** in diabetic rats with hyperglycaemia, concomitant with elevation of plasma **triglycerides** and free fatty acids, the present experiments demonstrate that these 2 factors causing placental glycogen and **triglyceride** accumulation can be dissociated. On the other hand, maternal and fetal liver **triglycerides** accumulate in the hyperglycaemic rats probably as a result of local de vovo lipogenesis.

L12 ANSWER 46 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on

STN DUPLICATE 11
ACCESSION NUMBER: 1982:203629 BIOSIS
DOCUMENT NUMBER: PREV198273063613; BA73:63613
TITLE: EFFECTS OF GOLD THIO GLUCOSE TREATMENT ON ENZYMES OF GLYCOGEN METABOLISM IN LIVER AND SKELETAL MUSCLE IN MICE.
AUTHOR(S): BENZO C A [Reprint author]; STEARNS S B
CORPORATE SOURCE: DEP OF ANATOMY, STATE UNIV OF NEW YORK, UPSTATE MEDICAL CENTER, SYRACUSE, NY 13210, USA
SOURCE: Biochemical Medicine, (1981) Vol. 26, No. 3, pp. 395-402. CODEN: BIMDA2. ISSN: 0006-2944.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Portions of liver and skeletal muscles from GTG[gold thioglucose]-obese and lean mice were analyzed for glycogen synthase and **glycogen phosphorylase** activities, and for tissue levels of glycogen, free fatty acids and **triglycerides.** Hepatic glycogen synthase activity in GTG-treated mice was comparable to that in control animals, but **glycogen phosphorylase** activity was increased and hepatic glycogen content was decreased in GTG mice. The activities of both enzymes in pectoralis muscle were comparable in both GTG-treated and control mice, and muscle glycogen levels were also similar. **Triglyceride** levels were markedly elevated in both liver and diaphragm from GTG-treated mice. Glycogen synthesis in both liver and skeletal muscle apparently is insulin resistant in GTG-obese mice, and concomitant changes in lipid metabolism occur in these tissues.

L12 ANSWER 47 OF 51 MEDLINE on STN DUPLICATE 12
ACCESSION NUMBER: 81189625 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7014330
TITLE: Central nervous system regulation of liver and adipose tissue metabolism.
AUTHOR: Shimazu T
SOURCE: Diabetologia, (1981 Mar) 20 Suppl 343-56. Ref: 78 Journal code: 0006777. ISSN: 0012-186X.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198107
ENTRY DATE: Entered STN: 19900316 Last Updated on STN: 19900316 Entered Medline: 19810709

AB Hypothalamic and autonomic nervous regulation of carbohydrate and amino acid metabolism in the liver and of lipid metabolism in adipose tissues is described. The direct neural mechanism underlying this regulation has been evaluated. Electrical stimulation of the ventromedial hypothalamic nucleus (VMH)-splanchnic nerve system causes glycogenolysis in the liver by rapid activation of **glycogen phosphorylase**, whereas electrical stimulation of the lateral hypothalamic nucleus (LH)-vagus nerve system promotes glycogenesis in the liver by activation of glycogen synthetase, through direct neural and neural-hormonal mechanisms. Studies on chemical coding of the hypothalamic neurones have revealed that norepinephrine-sensitive neurones in the VMH and acetylcholine-sensitive neurones in the LH are specifically involved in the regulation of liver phosphorylase and glycogen synthetase, respectively. Acetylcholine-sensitive neurones of the LH were also found to be concerned in regulation of hepatic tyrosine and aminotransferase activity, through intermediation of the cholinergic system in the LH-vagal pathway. Finally, it has been

shown that the VMH acts as a regulatory centre for lipolysis in adipose tissues by modulating activation of the sympathetic nervous system. In addition, stimulation of the VMH enhanced lipogenesis in brown adipose tissue preferentially, probably through a mechanism mediated by sympathetic innervation of this tissue. The latter finding suggests that both the breakdown and resynthesis of **triglycerides** in brown adipose tissue, but not in white adipose tissue, are accelerated by stimulation of the VMH.

L12 ANSWER 48 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1979:198924 BIOSIS
DOCUMENT NUMBER: PREV197968001428; BA68:1428
TITLE: LONGISSIMUS MUSCLE AND PLASMA ENZYMES AND METABOLITES IN FETALLY DECAPITATED PIGS.
AUTHOR(S): KRAELING R R [Reprint author]; RAMPACEK G B; CAMPION D R; RICHARDSON R L
CORPORATE SOURCE: RICHARD B RUSSELL AGRIC RES CENT, US FED RES, SCI EDUC ADM, ATHENS, GA 30604, USA
SOURCE: Growth, (1978) Vol. 42, No. 4, pp. 458-468.
CODEN: GROWAH. ISSN: 0017-4793.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Fetuses of 9 gilts were decapitated (D) in utero and fetuses of 8 gilts were sham operated (C) at 43-47 days of pregnancy. At 110 days, 1 fetus from each gilt was studied. Heart, liver, kidney, thyroid and body wts, were recorded. Thyroids were evaluated for the degree of colloid accumulation and height of the follicular epithelium. Blood glucose, lactate, **triglycerides** and creatine phosphokinase activity were determined. Longissimus muscle glycogen was evaluated histochemically. Longissimus muscle total phosphorylase, phosphorylase a, G-6-PDH [glucose-6-phosphate dehydrogenase] and SDH [sorbitol dehydrogenase] activity and glycogen were determined biochemically. The D fetuses were hairless, edematous, devoid of adrenal glands and unaffected by maternal anesthesia. The fetal pig pituitary gland apparently is not required for continued fetal growth but is necessary for normal organ and endocrine gland development. Fetal decapitation caused delayed maturation of the longissimus muscle with little change in anaerobic glycolytic capacity but decreased aerobic glycolytic capacity accompanied by increased activity of the pentose shunt.

L12 ANSWER 49 OF 51 MEDLINE on STN DUPLICATE 13

ACCESSION NUMBER: 77161986 MEDLINE
DOCUMENT NUMBER: PubMed ID: 323004
TITLE: Physical training in man. Skeletal muscle metabolism in relation to muscle morphology and running ability.
AUTHOR: Bylund A C; Bjuro T; Cederblad G; Holm J; Lundholm K; Sjostroom M; Angquist K A; Schersten T
SOURCE: European journal of applied physiology and occupational physiology, (1977 Mar 15) 36 (3) 151-69. Ref: 54
Journal code: 0410266. ISSN: 0301-5548.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197706
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19980206

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

Entered Medline: 19770630

AB The metabolic and morphologic adaptation to physical training in skeletal muscle tissue of eleven middle-aged, physically untrained men was studied. Muscle biopsies were taken from the vastus lateralis before, after 8 weeks and after 6 months of physical training for analysis of metabolic and morphologic variables. Glucose tolerance test indicated increased insulin sensitivity after 6 months of physical training. The activities of **glycogen phosphorylase**, hexokinase and glucose-6-P-dehydrogenase were increased but other enzymes involved in glycogen turnover and glycolysis were unchanged after 6 months of physical traning. The activities of citrate synthase and cytochrome-c-oxidase, representing the oxidative capacity were significantly increased already after 8 weeks of physical training. The incorporation rate of palmitate-carbon into CO2 and **triglycerides** increased, and the incorporation rate of leucine-carbon into CO2 decreased with 6 months of physical training. The fiber diameter of both Type 1- and Type 2-fibers increased, while the mitochondrial volume increased predominantly in Type 2-fibers. Significant correlations were found between metabolic, physiologic and morphologic variables before and after physical training. The results indicate an increased oxidative capacity, mainly located to Type 2-fibers, and an increased utilization of fatty acids in response to this type of physical training.

L12 ANSWER 50 OF 51 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1979:453291 CAPLUS
DOCUMENT NUMBER: 91:53291
TITLE: Data on the structure and histochemistry of the skin and mucosa of the lips of marmosets (Callithrix jacchus)
AUTHOR(S): Santos, Agnaldo Jose Dos
CORPORATE SOURCE: Inst. Cienc. Saude, Univ. Fed. Bahia, Salvador, Brazil
SOURCE: Boletim do Instituto Biologico da Bahia (1976), 15(1), 78-92
CODEN: BBIBAT; ISSN: 0020-3661
DOCUMENT TYPE: Journal
LANGUAGE: Portuguese

AB The structure and histochem. of the epidermis, dermis, hypodermis, mucous membrane, and red portion of the lips of marmosets (C. jacchus) were studied. The carbohydrate metabolism in the epidermis and mucous membrane of the marmoset lips was scant, as suggested by the absence of UDP-glucose, and very small amts. of **glycogen**, **phosphorylases**, glucose 6-phosphatase, and fructose 1,6-diphosphate. The NAD-dependent dehydrogenases (lactate, alc., malate, α-glycerophosphate, and β-hydroxybutyrate dehydrogenases) showed a stronger reactivity in the deeper layers, whereas the NADP-dependent dehydrogenases (glucose-6-phosphate, 6-phosphogluconate, and isocitrate dehydrogenases and aconitase) were more abundant in the superficial layers except in the stratum corneum where they were always neg. Succinate dehydrogenase and cytochrome oxidase were more reactive in the basal layers, whereas acid phosphatase and nonspecific esterase showed stronger reactivity in the superficial layers, including the stratum corneum. Alkaline phosphatases were not found in these epithelial sheets except in the amelanotic melanocytes of the mucous membrane epithelium. This mucous membrane epithelium differed again from that of the epidermis by the stronger basophilia of its deeper cells and by the absence of SH groups in its more superficial cells. Moreover, it contained a larger amount of intercellular cement (neutral and acidic polysaccharides). The papillae of the lamina propria contained a large number of collagenous fibers; the reticular fibers were concentrated in the basement membranes and the elastic fibers were thinner and existed only in a small amount The ground substance contained neutral

mucopolysaccharides associated with sialic acid and hyaluronic acid. Fibrocytes, histiocytes containing acid phosphatase and nonspecific esterase, and mast cells with a large amount of peroxidase were seen in the corium. Cholinesterase-pos. nerve fibers constituted a dense plexus around some blood vessels but were scant in the other parts of the corium. A loose connective tissue constituted the hypodermis in which a large number of fat cells containing neutral fat (**triglycerides**) was present. No cholesterol esters were found in these cells.

L12 ANSWER 51 OF 51 MEDLINE on STN DUPLICATE 14
ACCESSION NUMBER: 75198570 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1145375
TITLE: Catecholamine release as mediator of intracellular enzyme activation in ischaemic perfused rat hearts.
AUTHOR: Hough F S; Gevers W
SOURCE: South African medical journal. Suid-Afrikaanse tydskrif vir geneeskunde, (1975 Mar 29) 49 (14) 538-43.
Journal code: 0404520. ISSN: 0256-9574.
PUB. COUNTRY: South Africa
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197509
ENTRY DATE: Entered STN: 19900310
Last Updated on STN: 19980206
Entered Medline: 19750922

AB Isolated rat hearts perfused at suboptimal pressures have been studied as a model for generalised myocardial ischaemia. **Glycogen phosphorylase** a and hormone-sensitive **triglyceridase** activities, measured as markers for endogenous catecholamine release, were significantly increased at low perfusion pressures. Pharmacological blockage of noradrenaline re-uptake accentuated these effects, and depletion of catecholamine reserves eliminated them. This phenomenon may be important in the pathophysiology of cardiac ischaemia and its serious complications.

=> dis his ful

(FILE 'HOME' ENTERED AT 11:03:51 ON 30 AUG 2005)

FILE 'REGISTRY' ENTERED AT 11:04:16 ON 30 AUG 2005
L1 STR
L2 0 SEA SSS SAM L1
L3 0 SEA SSS FUL L1
L4 STR L1
L5 0 SEA SSS SAM L4
L6 0 SEA SSS FUL L4
D L3 QUE STAT
D L6 QUE STAT

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 11:11:34 ON 30 AUG 2005
L7 12 SEA ABB=ON PLU=ON GLYCOGEN PHOSPHORYLASE AND TRIGLYCER?
L8 14 SEA ABB=ON PLU=ON GLYCOGEN PHOSPHORYLASE AND TRIGLYCER?
L9 13 SEA ABB=ON PLU=ON GLYCOGEN PHOSPHORYLASE AND TRIGLYCER?
L10 39 SEA ABB=ON PLU=ON GLYCOGEN PHOSPHORYLASE AND TRIGLYCER?
TOTAL FOR ALL FILES
L11 78 SEA ABB=ON PLU=ON GLYCOGEN PHOSPHORYLASE AND TRIGLYCER?
L12 51 DUP REM L11 (27 DUPLICATES REMOVED)
D 1-51 IBIB ABS HITSTR

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

FILE HOME

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 AUG 2005 HIGHEST RN 862072-85-3
DICTIONARY FILE UPDATES: 29 AUG 2005 HIGHEST RN 862072-85-3

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* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
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Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

FILE MEDLINE
FILE LAST UPDATED: 27 AUG 2005 (20050827/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

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FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 25 August 2005 (20050825/ED)

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

FILE RELOADED: 19 October 2003.

FILE EMBASE
FILE COVERS 1974 TO 25 Aug 2005 (20050825/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

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FILE CAPLUS

FILE COVERS 1907 - 30 Aug 2005 VOL 143 ISS 10
FILE LAST UPDATED: 29 Aug 2005 (20050829/ED)

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